Appendix AB-I, Old and Middle River Flow Management

Attachment I.8 Particle Tracking Fate Modeling of Larval Smelt Entrainment

I.8.1 Delta Particle Tracking Modeling under Varying OMR Conditions

A sensitivity analysis using CalSim 3 and DSM2 Hydro and PTM models was conducted to assess relative risk of species at the export facilities and water supply effects under a set of different OMR limits on Delta operations. The CalSim 3 model simulated operational conditions (flows into the Delta and exports) under a range of OMR and Inflow (from Sacramento River and San Joaquin River) conditions. Using results of these CalSim 3 scenarios, DSM2 Hydro was used to determine Delta flow conditions, and respectively, DSM2 PTM module was used to assess entrainment of particles at export facilities under these varying conditions. DSM2 PTM was run in two modes: one assuming neutrally buoyant and one assuming surface-oriented particles. For each year in the 100-year CalSim 3 simulation period and for each mode, the model was run at 39 particle insertion locations in the Delta. For each month between December and June. Each insertion location was started at the beginning of each month and run for 45 days. The resulting 40,000+ simulations provided a wide variety of flow, particle insertion, and particle behavior conditions from which to draw conclusions.

I.8.2 Methods

I.8.2.1 DSM2 – PTM

DSM2-PTM simulates pseudo-3D transport of neutrally buoyant particles based on the flow field simulated by HYDRO. The PTM module simulates the transport and fate of individual particles traveling throughout the Delta. The model uses geometry files, velocity, flow, and stage output from the HYDRO module to monitor the location of each individual particle using assumed vertical and lateral velocity profiles and specified random movement to simulate mixing. The location of a particle in a channel is determined as the distance from the downstream end of the channel segment (x), the distance from the centerline of the channel (y), and the distance above the channel bottom (z). PTM has multiple applications ranging from visualization of flow patterns to simulation of discrete organisms such as fish eggs and larvae.

The longitudinal distance traveled by a particle is determined from a combination of the lateral and vertical velocity profiles in each channel. The transverse velocity profile simulates the effects of channel shear that occurs along the sides of a channel. The result is varying velocities across the width of the channel. The average cross-sectional velocity is multiplied by a factor based on the particle's transverse location in the channel. The model uses a fourth order polynomial to represent the velocity profile. The vertical velocity profile shows that particles located near the bottom of the channel move more slowly than particles located near the surface. The model uses the Von Karman logarithmic profile to create the velocity profile. Particles also move as a result of random mixing. The mixing rates (i.e., distances) are a function of the water depth and the velocity in the channel. Higher velocities and deeper water result in greater mixing.

At a junction, the path of a particle is determined randomly based on the proportion of flow. The proportion of flow determines the probability of movement into each reach. A random number, based on this determined probability, then governs where the particle will go. A particle that moves into an open water area, such as a reservoir, no longer retains its position information. A DSM2 open water area is considered a fully mixed reactor. The path out of the open water area is a decision based on the volume in the open water area, the time step, and the flow out of the area. At the beginning of a time step, the volume of the open water area, the volume of water leaving at each opening of the open water area, is determined. From that, the probability of the particle leaving the open water area is calculated. Particles entering exports or agricultural diversions are considered "lost" from the system. Their final destination is recorded. Once particles pass the Martinez boundary, they have no opportunity to return to the Delta (Smith 1998; Wilbur 2001; Miller 2002).

Particle tracking models (PTM) are excellent tools to visualize and summarize the impacts of modified hydrodynamics in the Delta. These tools can simulate the movement of passive particles or particles with behavior representing either larval or adult fish through the Delta. The PTM tools can provide important information relating hydrodynamic results to the analysis needs of biologists that are essential in assessing the impacts to the habitat in the Delta.

I.8.2.2 DSM2 – PTM Metrics

Fate Mapping – an indicator of entrainment. It is the percent of particles that go past various exit points in the system at the end of a given number of days after insertion.

I.8.2.3 PTM Particle Behavior

PTM simulations were conducted with passive particles and surface-oriented particles. Passive particles, representing behavior of larval Delta smelt, are distributed throughout the water column. Surface-oriented particles, representing behavior of larval longfin smelt, tend towards the top 10% of the water column. To assess effects of surface-oriented assumptions of larval longfin smelt fate, passive particle simulations were also conducted for larval longfin smelt.

I.8.2.4 PTM Period Selection

PTM simulation periods for the fate computations were in December through June in all the 100 years of the planning simulation period. The frequency of inflow pairings during December through March was calculated, and this reflects the timing for larval longfin smelt. As such, passive and surface-oriented particle simulations were conducted during this period. The frequency of inflow pairing during March through June was calculated, and this period reflects timing of larval Delta smelt. As such, passive particle simulations were conducted during this period.

I.8.2.5 PTM Simulations

PTM simulations are performed to derive the metrics described above. The particles are inserted at the 39 locations listed in Table I.8-1. The locations were identified based on the 20 mm Delta Smelt Survey Stations. Figure I.8-1 displays 20 mm Delta Smelt Survey Stations and particle insertion locations.

A total of 39 PTM simulations are performed in a batch mode for each insertion period. For each insertion period, 4,000 particles are inserted at the identified locations over a 24.75-hour period, starting on the 1st of the selected month. The fate of the inserted particles is tracked continuously over a 90-day simulation period. The particle flux is tracked at the key exit locations – exports, Delta agricultural intakes, past Chipps Island, to Suisun Marsh and past Martinez, and at several internal tracking locations. Generally, the fate of particles at the end 45 days after insertion is computed for the fate mapping analysis.

Table I.8-1. List of Particle Insertion Locations for Residence Time and Fate Computations

Location	DSM2 Node
San Joaquin River at Vernalis	1
San Joaquin River at Mossdale	7
San Joaquin River D/S of Rough and Ready Island	21
San Joaquin River at Buckley Cove	25
San Joaquin River near Medford Island	34
San Joaquin River at Potato Slough	39
San Joaquin River at Twitchell Island	41
Old River near Victoria Canal	75
Old River at Railroad Cut	86
Old River near Quimby Island	99
Middle River at Victoria Canal	113
Middle River u/s of Mildred Island	145
Grant Line Canal	174
Frank's Tract East	232
Threemile Slough	240

Location	DSM2 Node
Little Potato Slough	249
Mokelumne River d/s of Cosumnes confluence	258
South Fork Mokelumne	261
Mokelumne River d/s of Georgiana confluence	272
North Fork Mokelumne	281
Georgiana Slough	291
Miner Slough	307
Sacramento Deep Water Ship Channel	314
Cache Slough at Shag Slough	321
Cache Slough at Liberty Island	323
Lindsey slough at Barker Slough	322
Sacramento River at Sacramento	330
Sacramento River at Sutter Slough	339
Sacramento River at Ryde	344
Sacramento River near Cache Slough confluence	350
Sacramento River at Rio Vista	351
Sacramento River d/s of Decker Island	353
Sacramento River at Sherman Lake	354
Sacramento River at Port Chicago	359
Montezuma Slough at Head	418
Montezuma Slough at Suisun Slough	428
San Joaquin River d/s of Dutch Slough	461
Sacramento River at Pittsburg	465
San Joaquin River near Jersey Point	469

I.8.2.6 Output Parameters

The particle tracking models can be used to assist in understanding passive fate and transport, or through consideration of behavior or residence time. In, general the following outputs are generated:

- Fate of particles and cut lines or regions.
- Time of travel breakthrough curves.
- Residence time.

For the purposes of this effort, only particle fate outputs were assessed.

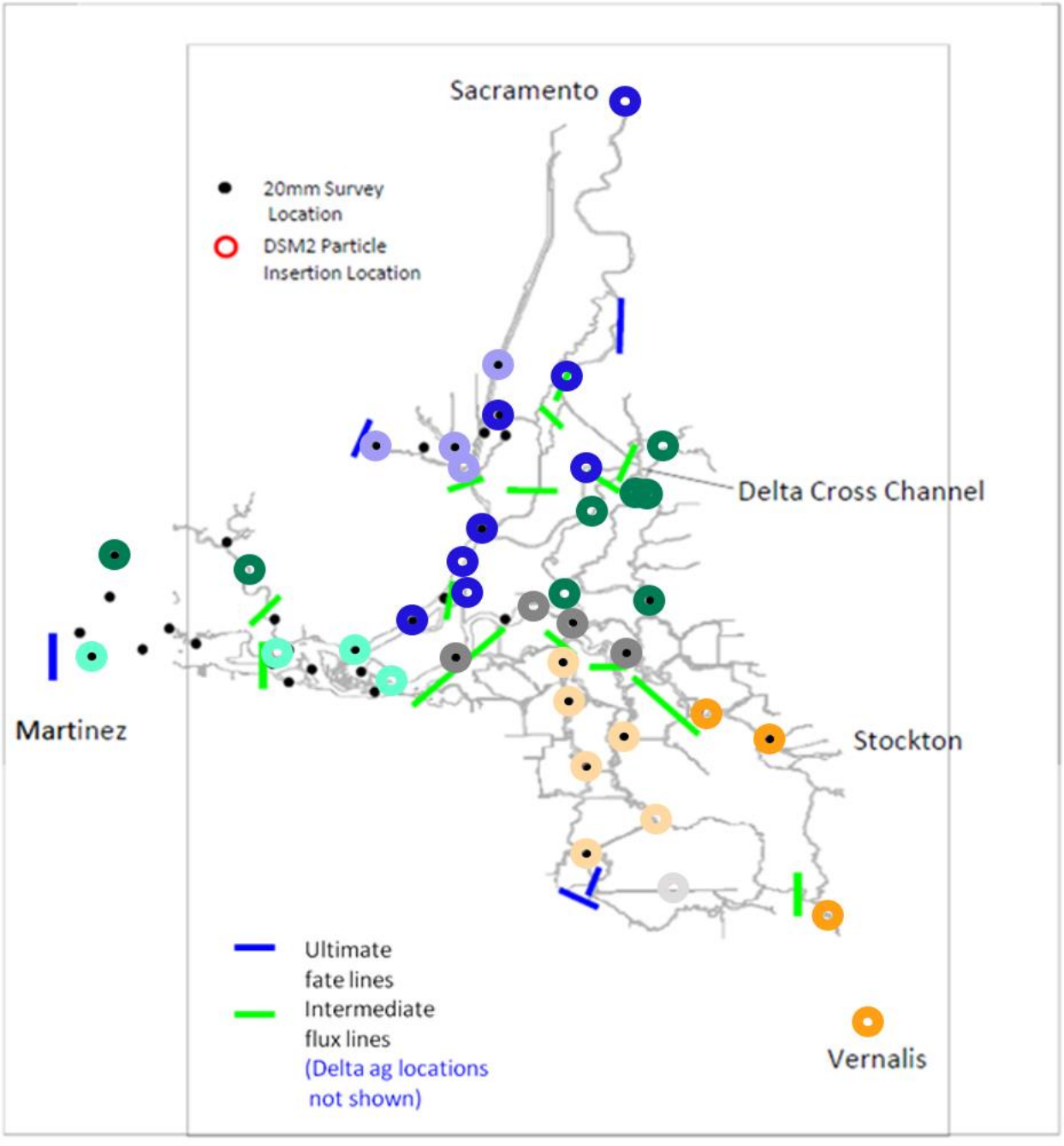

Figure I.8-1. Particle Insertion Locations for Fate Computations, Color-Coded by Yolo (purple), Sacramento River (dark blue), Mokelumne River (green), Central (dark gray), Old and Middle River (OMR) (light orange), San Joaquin River (orange), South Delta (light gray), West Delta (turquoise), and Suisun Marsh Regions (green)

I.8.3 Assumptions / Uncertainty

PTM modeling results of neutrally buoyant particles serve as a proxy for larval Delta Smelt which can be found distributed throughout the water column and throughout the Delta. PTM results for neutrally buoyant particles are aggregated March through June.

PTM modeling results of surface-oriented particles serve as a proxy for larval Longfin Smelt which tend to be found towards the top 10% of the water column and throughout the Delta. PTM results for surface-oriented particles are aggregated December through March.

I.8.4 Results

NMFS 2019 Biological Opinion criteria for proportion and frequency were applied to identify which injection site regions were highlighted in the narrative discussion. Injection regions and particle fate locations not discussed in the narratives were identified as locations where there was less variability in particle fate across bins.

- Proportion thresholds are as follows: low 0% – 2%, medium 2% - 70% high: 70% - 100%.
- Frequency thresholds are as follows: low 0% - 25%, medium 25% - 75%, high 75% - 100%.

Both types of particles (neutrally buoyant, surface oriented) and both bin types (Inflow, OMR) were assessed.

For each BA modeled scenario (excluding EXP1 and EXP3) and bin, the predicted percent of particles injected at a certain location with a fate at the facilities (reducing OMR and inflow bins) was assessed using this method:

- Remove all fate locations that are not *Entrained at Exports*, which are *West of Chipps*, *Remaining in Delta*, and *Crossed the San Joaquin River to South Delta*.
- Identify which of the fate percentages fall in the medium NMFS proportion category (2% - 70%) across all OMR or inflow bins for modeled scenarios (No Action Alternative and 4 phases of Alternative 2).
- Identify the percentage of those instances (from above) where the medium proportion categories occurred out of the total possible predictions.
- Identify the regions which had a low, medium, and high NMFS frequency category (25% - 75%) for instances of medium proportion category (2% - 70%).
- Use identified regions for narrative discussion including descriptions of those regions that fall inside or outside the above conditions.

As an example, from the method for BA modeled scenarios, neutrally buoyant particles (1 particle type) injected in the *Sacramento River Region* (1 region) binned across Inflow bins (9 groups) and considering a single fate location (*Entrained at Exports*, 1 location) for modeled scenarios (5 scenarios) results in consideration of 45 possible estimates. 32 of the 45 possible values (71%) for particles injected in the Sacramento River Region fall into the medium proportion category (2% - 70%). A 71% frequency of medium proportion falls inside the medium frequency bounds (25% - 75%); thus, the Sacramento River Region injection site was included in the narrative discussion. Suggesting that regardless of inflows and OMR considered, a medium proportion of particles always arrive at the facilities from the Sacramento River.

For each EIS modeled scenario and bin, the predicted percent of particles injected at a certain location with a fate at the facilities (reducing OMR or inflow bins) was assessed using this method:

- Remove all fate locations that are not *Entrained at Exports*, which are *West of Chipps*, *Remaining in Delta*, and *Crossed the San Joaquin River to South Delta*.
- Identify which of the fate percentages fall in the medium NMFS proportion category (2% - 70%) reducing OMR and inflow bins, and modeled scenarios.
- Identify the percentage of those instances (from above) where the medium proportion categories occurred out of the total possible predictions.
- Identify the regions which had a low, medium, and high NMFS frequency category (25% - 75%) for instances of medium proportion category (2% - 70%).
- Use identified regions for narrative discussion including descriptions of those regions that fall inside or outside the above conditions.

As an example, from the method for EIS modeled scenarios, neutrally buoyant particles (1 particle type) injected in the *Sacramento River Region* (1 region) binned across Inflow bins (9 groups) and considering a single fate location (*Entrained at Exports*, 1 location) for modeled scenarios (8 scenarios) results in consideration of 72 possible estimates. 50 of the 72 possible values (69%) for particles injected in the Sacramento River Region fall into the medium proportion category (2% - 70%). A 69% frequency of medium proportion falls inside the medium frequency bounds (25% - 75%); thus, the Sacramento River Region injection site was included in the narrative discussion. Suggesting that regardless of inflows and OMR considered, a medium proportion of particles always arrive at the facilities from the Sacramento River.

All model results are provided in the tables and figures below.

The following regions were identified for discussion in the Biological Assessment (BA) narratives:

- For neutrally buoyant particles grouped by Inflow bins
    - 3 out of the 9 injection regions are representative of medium frequency of medium proportion in the Bay Delta: *Sacramento River Region*, *San Joaquin River Region*, and *Yolo Bypass Region*.

    - 4 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *Old and Middle River Region*, *Western Delta Region*, *Southern Delta Region*, and *Suisun Bay Region*
    - 2 out of the 9 injection regions are representative of high frequency of medium proportion in the Bay Delta: *Central Delta Region* and *Mokelumne River Region*
    - 3 medium injection regions are discussed in the narrative below. The impacts of regions with either low or high, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.
- For surface-oriented particles grouped by Inflow bins
    - 3 out of the 9 injection regions are representative of medium frequency of medium proportion in the Bay Delta: *Sacramento River Region*, *Western Delta Region*, and *Yolo Bypass Region*.
    - 4 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *San Joaquin River Region*, *Old and Middle River Region*, *Southern Delta Region*, *Suisun Bay Region*
    - 2 out of the 9 injection regions are representative of high frequency of medium proportion in the Bay Delta: *Central Delta Region* and *Mokelumne River Region*
    - 3 medium injection regions are discussed in the narrative below. The impacts of regions with either low or high, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.
- For neutrally buoyant particles grouped by OMR bins
    - 4 out of the 9 injection regions is representative of medium frequency of medium proportion in the Bay Delta: *San Joaquin River Region*, *Central Delta Region*, *Mokelumne River Region*, and *Sacramento River Region*
    - 5 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *Yolo Bypass*, *Old and Middle River Region*, *Southern Delta Region*, *Suisun Bay Region*, and *Western Delta Region*
    - None of the 9 injection regions are representative of high frequency of medium proportion in the Bay Delta.
    - 4 medium injection regions are discussed in the narrative below. The impacts of regions with either low or high, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.

- For surface-oriented particles grouped by OMR bins
    - 3 out of the 9 injection regions are representative of medium frequency of medium proportion in the Bay Delta: *Central Delta Region*, *Mokelumne River Region*, and *Yolo Bypass Region*
    - 5 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *Western Delta Region*, *Suisun Bay Region*, *Southern Delta Region*, *San Joaquin River Region*, and *Old and Middle River Region*
    - 1 out of the 9 injection regions is representative of high frequency of medium proportion in the Bay Delta: *Sacramento River*
    - 3 medium injection regions are discussed in the narrative below. The impacts of regions with either low or high, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.

The following regions were identified for discussion in the Environmental Impact Statement (EIS) narratives:

- For neutrally buoyant particles grouped by Inflow bins
    - 3 out of the 9 injection regions are representative of medium frequency of medium proportion in the Bay Delta: *Sacramento River Region*, *San Joaquin River Region*, and *Yolo Bypass Region*.
    - 4 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *Western Delta Region*, *Suisun Bay Region*, *Old and Middle River Region*, and *Southern Delta Region*
    - 2 out of the 9 injection regions are representative of high frequency of medium proportion in the Bay Delta: *Central Delta Region* and *Mokelumne River Region*
    - 3 medium injection regions are discussed in the narrative below. The impacts of regions with either low or high, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.
- For surface-oriented particles grouped by Inflow bins
    - 2 out of the 9 injection regions are representative of medium frequency of medium proportion in the Bay Delta: *Western Delta Region* and *Yolo Bypass Region*.
    - 4 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *Old and Middle River Region*, *San Joaquin River Region*, *Southern Delta Region*, and *Suisun Bay Region*

    - 3 out of the 9 injection regions are representative of high frequency of medium proportion in the Bay Delta: *Central Delta Region*, *Mokelumne River Region*, and *Sacramento River Region*
    - 2 medium injection regions are discussed in the narrative below. The impacts of regions with either low or high, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.
- For neutrally buoyant particles grouped by OMR bins
    - 1 out of the 9 injection regions is representative of medium frequency of medium proportion in the Bay Delta: *San Joaquin River Region*.
    - 5 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *Old and Middle River Region*, *Southern Delta Region*, *Suisun Bay Region*, *Western Delta Region*, and *Yolo Bypass Region*
    - 3 out of the 9 injection regions are representative of high frequency of medium proportion in the Bay Delta: *Central Delta Region*, *Mokelumne River Region*, and *Sacramento River Region*
    - 1 medium injection region is discussed in the narrative below. The impacts of regions with either a low or high proportion, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.
- For surface-oriented particles grouped by OMR bins
    - 1 out of the 9 injection regions is representative of medium frequency of medium proportion in the Bay Delta: *Western Delta Region*.
    - 4 out of the 9 injection regions are representative of low frequency of medium proportion in the Bay Delta: *Old and Middle River Region*, *San Joaquin River Region*, *Southern Delta Region*, and *Suisun Bay Region*
    - 4 out of the 9 injection regions are representative of high frequency of medium proportion in the Bay Delta: *Central Delta Region*, *Mokelumne River Region*, *Sacramento River Region*, and *Yolo Bypass Region*
    - 1 medium injection region is discussed in the narrative below. The impacts of regions with either a low or high proportion, representing fate with a low effect (< 2%, impacts of export facilities consistently low) or high effect (> 70%, impacts of export facilities consistently high) respectively, and not included in narratives.

I.8.4.1 Narrative: BA

I.8.4.1.1 Neutrally Buoyant, Inflow Bins: Table I.8-2 through Table I.8-10 (BA) || Figure I.8-1 through Figure I.8-10

Neutrally buoyant particle percent of particle fate is an average over the months of March through June. 3 regions were selected out of the 9 injection regions for neutrally buoyant particles grouped by Inflow bins as representative of medium frequency of a medium proportion in the Bay Delta: *Sacramento River Region*, *San Joaquin River Region*, and *Yolo Bypass Region*.

- **Injection Point:** *Sacramento River Region*; **Particle Fate:** *Entrained at Exports*
    - For the Inflow bins with high Sacramento River influence ("hihi", "himed", and "hilo"), mean particle percentage ranged from 0% (No Action Alternative and all four phases of Alternative 2 under Inflow bin "himed") to 3% (No Action Alternative under Inflow bin "hilo").
    - For the Inflow bins with medium Sacramento River influence ("medhi", "medmed", and "medlo"), mean particle percentage ranged from 2% (No Action Alternative and all four phases of Alternative 2 under Inflow bin "medhi") to 16% (No Action Alternative under Inflow bin "medlo").
    - For the Inflow bins with low Sacramento River influence ("lohi", "lomed", and "lolo"), mean particle percentage ranged from 4% (No Action Alternative under Inflow bin "lohi") to 9% (Alternative 2 without TUCP Delta VA and without TUCP All VA under Inflow bin "lolo").
- **Injection Point:** *San Joaquin River Region*; **Particle Fate:** *Entrained at Exports*
    - For the Inflow bins with high Sacramento River influence ("hihi", "himed", and "hilo"), mean particle percentage ranged from 45% (No Action Alternative and Alternative 2 without TUCP Delta VA under Inflow bin "hihi") to 90% (Alternative 2 with TUCP without VA and without TUCP without VA under Inflow bin "hilo").
    - For the Inflow bins with medium Sacramento River influence ("medhi", "medmed", and "medlo"), mean particle percentage ranged from 53% (No Action Alternative under Inflow bin "medhi") to 86% (No Action Alternative under Inflow bin "medlo").
    - For the Inflow bins with low Sacramento River influence ("lohi", "lomed", and "lolo"), mean particle percentage ranged from 61% (No Action Alternative under Inflow bin "lolo") to 71% (Alternative 2 with TUCP without VA under Inflow bin "lohi" and Alternative 2 without TUCP without VA under Inflow bin "lomed").

- **Injection Point:** *Yolo Bypass Region*; **Particle Fate:** *Entrained at Exports*
    - For the Inflow bins with high Sacramento River influence ("hihi", "himed", and "hilo"), mean particle percentage ranged from 0% (No Action Alternative and all phases of Alternative 2 under Inflow bin "hihi" and "himed", Alternative 2 with TUCP without VA and without TUCP without VA under Inflow bin "hilo") to 1% (No Action Alternative under Inflow bin "hilo").
    - For the Inflow bins with medium Sacramento River influence ("medhi", "medmed", and "medlo"), mean particle percentage ranged from 1% (No Action Alternative and all phases of Alternative 2 under Inflow bin "medhi", Alternative 2 with TUCP without VA, Alternative 2 without TUCP without VA and Alternative 2 without TUCP All VA under Inflow bin "medmed") to 6% (No Action Alternative under Inflow bin "medlo").
    - For the Inflow bins with low Sacramento River influence ("lohi", "lomed", and "lolo"), mean particle percentage ranged from 2% (No Action Alternative and all phases of Alternative 2 under Inflow bin "lohi"; Alternative 2 with TUCP without VA, without TUCP without VA, and without TUCP Delta VA under Inflow bin "lomed"; No Action Alternative, Alternative 2 with TUCP without VA and without TUCP without VA under Inflow bin "lolo") to 4% (Alternative 2 with TUCP All VA under Inflow bin "lolo").

There are several injection regions for neutrally buoyant particles grouped by Inflow bins which technically are classified as low frequency of a medium proportion. However, these regions fall into this classification bin because there are no instances of a medium proportion. Regions that fall into this category are *Southern Delta Region* and *Suisun Bay Region*. *Southern Delta Region* and *Suisun Bay Region* show a high frequency of a high proportion and a high frequency of low proportion, respectively, of particle entrainment at the facilities. Particles injected in the *Southern Delta Region* are highly likely to become entrained at facilities while those injected in *Suisun Bay Region* are highly unlikely to become entrained at facilities.

I.8.4.1.2 Surface Oriented, Inflow Bins: Table I.8-11 through Table I.8-19 (BA) || Figure I.8-20 through Figure I.8-28

Surface oriented particle percent of particle fate is an average over the months of December through March. 3 regions were selected out of 9 injection regions for surface-oriented particles grouped by Inflow bins as representative of medium frequency of a medium proportion in the Bay Delta: *Sacramento River Region*, *Western Delta Region*, and *Yolo Bypass Region*.

- **Injection Point:** *Sacramento River Region*; **Particle Fate:** *Entrained at Exports*
    - For the Inflow bins with high Sacramento River influence ("hihi", "himed", and "hilo"), mean particle percentage ranged from 1% (No Action Alternative and all phases of Alternative 2 under Inflow bin "hihi") to 5% (No Action Alternative and all phases of Alternative 2 under Inflow bin "hilo").
    - For the Inflow bins with medium Sacramento River influence ("medhi", "medmed", and "medlo"), mean particle percentage ranged from 3% (No Action

Alternative and Alternative 2 without TUCP Delta VA and without TUCP All VA under Inflow bin "medhi") to 15% (No Action Alternative under Inflow bin "medlo").

- For the Inflow bins with low Sacramento River influence ("lohi", "lomed", and "lolo"), mean particle percentage ranged from 7% (Alternative 2 without TUCP Delta VA and without TUCP All VA under Inflow bin "lomed") to 16% (No Action Alternative under Inflow bin "lohi").

- **Injection Point:** *Western Delta Region*; **Particle Fate:** *Entrained at Exports*
    - For the Inflow bins with high Sacramento River influence ("hihi", "himed", and "hilo"), mean particle percentage ranged from 0% (No Action Alternative and all phases of Alternative 2 under Inflow bin "hihi" and "himed"; No Action Alternative, Alternative 2 with TUCP without VA, Alternative 2 without TUCP without VA, and Alternative 2 without TUCP Delta VA under Inflow bin "hilo") to 1% (Alternative 2 without TUCP All VA under Inflow bin "hilo").
    - For the Inflow bins with medium Sacramento River influence ("medhi", "medmed", and "medlo"), mean particle percentage ranged from 0% (No Action Alternative and all phases of Alternative 2 under Inflow bin "medhi") to 4% (No Action Alternative and all phases of Alternative 2 under Inflow bin "medlo").
    - For the Inflow bins with low Sacramento River influence ("lohi", "lomed", and "lolo"), mean particle percentage ranged from 1% (Alternative 2 without TUCP Delta VA and without TUCP All VA under Inflow bin "lomed") to 4% (No Action Alternative and all phases of Alternative under Inflow bin "lolo"; No Action Alternative, Alternative 2 without TUCP Delta VA, Alternative 2 without TUCP All VA under Inflow bin "lohi").
- **Injection Point:** *Yolo Bypass Region*; **Particle Fate:** *Entrained at Exports*
    - For the Inflow bins with high Sacramento River influence ("hihi", "himed", and "hilo"), mean particle percentage ranged from 0% (No Action Alternative and all phases of Alternative 2 under Inflow bin "hihi") to 2% (Alternative 2 without TUCP without VA and without TUCP Delta VA under Inflow bin "hilo").
    - For the Inflow bins with medium Sacramento River influence ("medhi", "medmed", and "medlo"), mean particle percentage ranged from 1% (No Action Alternative and all phases of Alternative 2 under Inflow bin "medhi") to 6% (No Action Alternative and all phases of Alternative 2 under Inflow bin "medlo").
    - For the Inflow bins with low Sacramento River influence ("lohi", "lomed", and "lolo"), mean particle percentage ranged from 3% (Alternative 2 without TUCP Delta VA and without TUCP All VA under Inflow bin "lomed") to 7% (No Action Alternative, Alternative 2 with TUCP without VA, Alternative 2 without TUCP Delta VA under Inflow bin "lohi"; No Action Alternative, Alternative 2 with TUCP without VA, Alternative 2 without TUCP Delta VA under Inflow bin "lolo").

There are several injection regions for surface-oriented particles grouped by Inflow bins which technically are classified as low frequency of a medium proportion. However, these regions fall into this classification bin because there are no instances of a medium proportion. Regions that fall into this category are *Old and Middle River Region*, *Southern Delta Region*, and *Suisun Bay Region*. *Old and Middle River Region* and *Southern Delta Region* show a high frequency of a high proportion of particle entrainment at the facilities. Suisun Bay Region shows a high frequency of a low proportion of particle entrainment at the facilities. Particles injected in the *Old and Middle River Region* and *Southern Delta Region* are highly likely to become entrained at facilities while those injected in *Suisun Bay Region* are highly unlikely to become entrained at facilities.

I.8.4.1.3 Neutrally Buoyant, OMR Bins: Table I.8-20 through Table I.8-28 (BA) || Figure I.8-11 through Figure I.8-19

Neutrally buoyant particle percent of particle fate is an average over the months of March through June. 4 regions were selected out of the 9 injection regions for neutrally buoyant particles grouped by OMR bins as representative of medium frequency of a medium proportion in the Bay Delta: *San Joaquin River Region*, *Central Delta Region*, *Mokelumne River Region*, and *Sacramento River Region*. The most negative OMR bin (-5,500) resulted in "NA" for all regions, fate locations, and alternatives.

- **Injection Point:** *San Joaquin River Region*; **Particle Fate:** *Entrained at Exports*
    - For the least negative OMR bin (-2,000), mean particle percentage ranged from 56% (Alternative 2 with TUCP without VA) to 59% (No Action Alternative). For OMR bin -3,500, mean particle percentage ranged from 69% (No Action Alternative and Alternative 2 without TUCP Delta VA) to 72% (Alternative 2 with TUCP without VA and without TUCP without VA). For OMR bin -5,000, mean particle percentage ranged from 76% (Alternative 2 without TUCP without VA) to 88% (No Action Alternative).
- **Injection Point:** *Central Delta Region*; **Particle Fate:** *Entrained at Exports*
    - For the least negative OMR bin (-2,000), mean particle percentage ranged from 14% (Alternative 2 with TUCP without VA, Alternative 2 without TUCP Delta VA, and Alternative 2 without TUCP All VA) to 15% (No Action Alternative and Alternative 2 without TUCP without VA). For OMR bin -3,500, mean particle percentage ranged from 19% (No Action Alternative) to 22% (Alternative 2 with TUCP without VA and Alternative 2 without TUCP All VA). For OMR bin -5,000, mean particle percentage ranged from 23% (Alternative 2 without TUCP without VA and with TUCP without VA) to 44% (No Action Alternative).

- **Injection Point:** *Mokelumne River Region*; **Particle Fate:** *Entrained at Exports*
    - For the least negative OMR bin (-2,000), mean particle percentage ranged from 13% (Alternative 2 with TUCP without VA) to 16% (No Action Alternative). For OMR bin -3,500, mean particle percentage ranged from 24% (No Action Alternative) to 28% (Alternative 2 without TUCP All VA). For OMR bin -5,000, mean particle percentage ranged from 34% (Alternative 2 with TUCP without VA and without TUCP without VA) to 59% (No Action Alternative).
- **Injection Point:** *Sacramento River Region*; **Particle Fate:** *Entrained at Exports*
    - For the least negative OMR bin (-2,000), mean particle percentage was 3% under the No Action Alternative and all four phases of Alternative 2. For OMR bin -3,500, mean particle percentage ranged from 3% (No Action Alternative, Alternative 2 with TUCP without VA and without TUCP without VA) to 4% (Alternative 2 without TUCP Delta VA and without TUCP All VA). For OMR bin -5,000, mean particle percentage ranged from 5% (Alternative 2 with TUCP without VA and without TUCP without VA) to 14% (No Action Alternative).

There are several injection regions for neutrally buoyant particles grouped by OMR bins which technically are classified as low frequency of a medium proportion. However, these regions fall into this classification bin because there are no instances of a medium proportion. Regions that fall into this category are *Old and Middle River Region*, *Southern Delta Region*, *Western Delta Region*, and *Suisun Bay Region*. *Old and Middle River Region* and *Southern Delta Region* show a medium frequency of a high proportion of particle entrainment at the facilities. *Western Delta Region* and *Suisun Bay Region* show a medium frequency of a low proportion of particle entrainment at the facilities. Particles injected in the *Old and Middle River Region* and *Southern Delta Region* are somewhat likely to become entrained at facilities while those injected in *Western Delta Region* and *Suisun Bay Region* are somewhat unlikely to become entrained at facilities.

I.8.4.1.4 Surface Oriented, OMR Bins: Table I.8-29 through Table I.8-37 (BA) || Figure I.8-29 through Figure I.8-37

Surface oriented particle percent of particle fate is an average over the months of December through March. 3 regions were selected out of the 9 injection regions for surface-oriented particles grouped by OMR bins as representative of medium frequency of a medium proportion in the Bay Delta: *Central Delta Region*, *Mokelumne River Region*, and *Yolo Bypass Region*.

- **Injection Point:** *Central Delta Region*; **Particle Fate:** *Entrained at Exports*
    - For the least negative OMR bin (-2,000), mean particle percentage ranged from 15% (Alternative 2 without TUCP Delta VA) to 26% (Alternative 2 with TUCP without VA). For OMR bin -3,500, mean particle percentage ranged from 28% (No Action Alternative) to 32% (Alternative 2 without TUCP Delta VA and without TUCP All VA). For OMR bin -5,000, mean particle percentage ranged from 39% (all four phases of Alternative 2) to 42% (No Action Alternative). For the most negative OMR bin (-5,500), mean particle percentage ranged from 80% (all four phases of Alternative 2) to 81% (No Action Alternative).

- **Injection Point:** *Mokelumne River Region*; **Particle Fate:** *Entrained at Exports*
    - For the least negative OMR bin (-2,000), mean particle percentage ranged from 16% (Alternative 2 without TUCP Delta VA) to 27% (Alternative 2 without TUCP without VA). For OMR bin -3,500, mean particle percentage ranged from 34% (No Action Alternative) to 39% (Alternative 2 without TUCP Delta VA and without TUCP All VA). For OMR bin -5,000, mean particle percentage ranged from 48% (Alternative 2 with TUCP without VA, Alternative 2 without TUCP without VA, Alternative 2 without TUCP Delta VA) to 53% (No Action Alternative). For the most negative OMR bin (-5,500), mean particle percentage ranged from 78% (No Action Alternative, Alternative 2 with TUCP without VA, Alternative 2 without TUCP without VA, Alternative 2 without TUCP All VA) to 79% (Alternative 2 without TUCP Delta VA).
- **Injection Point:** *Yolo Bypass Region*; **Particle Fate:** *Entrained at Exports*
    - For the least negative OMR bin (-2,000), mean particle percentage ranged from 1% (Alternative 2 without TUCP Delta VA and without TUCP All VA) to 3% (No Action Alternative, Alternative 2 with TUCP without VA, Alternative 2 without TUCP without VA). For OMR bin -3,500, mean particle percentage was 2% under the No Action Alternative and all four phases of Alternative 2. For OMR bin -5,000, mean particle percentage was 3% under the No Action Alternative and all four phases of Alternative 2. For the most negative OMR bin (-5,500), mean particle percentage was 16% under the No Action Alternative and all four phases of Alternative 2.

There are several injection regions for surface-oriented particles grouped by OMR bins which technically are classified as low frequency of a medium proportion. However, these regions fall into this classification bin because there are no instances of a medium proportion. Regions that fall into this category are *Old and Middle River Region*, *Southern Delta Region*, and *Suisun Bay Region*. *Old and Middle River Region* and *Southern Delta Region* show a high frequency of a high proportion of particle entrainment at the facilities. *Suisun Bay Region* shows a high frequency of a low proportion particle entrainment at the facilities. Particles injected in the *Old and Middle River Region* and *Southern Delta Region* are highly likely to become entrained at facilities while those injected in *Suisun Bay Region* are highly unlikely to become entrained at facilities.

I.8.4.2 Narrative: EIS

I.8.4.2.1 Neutrally Buoyant, Inflow Bins: Table I.8-38 through Table I.8-46 (EIS) || Figure I.8-38 through Figure I.8-46

3 injection regions were selected for neutrally buoyant particles grouped by Inflow bins as representative of medium frequency of a medium proportion in the Bay Delta: the *Sacramento River Region*, *San Joaquin River Region*, and *Yolo Bypass Region*. The following narrative is percent of particles injected in the *Sacramento River Region*, *San Joaquin River Region*, and *Yolo Bypass Region* with a fate at *Entrained at Exports*.

- **Injection region:** *Sacramento River Region*
    - Under high Sacramento inflow bins (“hihi, “himed”, and “hilo”), mean particle percentage ranged from 343% greater (Alternative 1 under inflow bin “himed”, 8%) to 58% less (Alternative 3 under inflow bin “hihi”, 0%) compared to the No Action Alternative.
    - Under medium Sacramento inflow bins (“medhi”, “medmed”, “medlo”), mean particle percentage ranged from 116% greater (Alternative 1 under inflow bin “medhi”, 3%) to 89% less (Alternative 3 under inflow bin “medmed”, 1%) compared to the No Action Alternative.
    - Under low Sacramento inflow bins (“lohi”, “lomed”, “lolo”), mean particle percentage ranged from 38% greater (Alternative 2 without TUCP All VA under inflow bin “lolo”, 9%) to 84% less (Alternative 3 under inflow bin “lomed”, 1%) compared to the No Action Alternative.
- **Injection region:** *San Joaquin River Region*
    - Under high Sacramento inflow bins (“hihi, “himed”, and “hilo”), mean particle percentage ranged from 22% greater (Alternative 1 under inflow bin “hihi”, 55%) to 52% less (Alternative 3 under inflow bin “hihi”, 22%) compared with the No Action Alternative.
    - Under medium Sacramento inflow bins (“medhi”, “medmed”, “medlo”), mean particle percentage ranged from 38% greater (Alternative 1 under inflow bin “medhi”, 73%) to 60% less (Alternative 3 under inflow bin “medhi”, 21%) compared with the No Action Alternative.
    - Under low Sacramento inflow bins (“lohi”, “lomed”, “lolo”), mean particle percentage ranged from 13% greater (Alternative 2 with TUCP without VA and Alternative 4 under Inflow bin “lohi”, 71%) to 45% less (Alternative 3 under Inflow bin “lomed”, 38%) compared with the No Action Alternative.
- **Injection region:** *Yolo Bypass Region*
    - Under high Sacramento inflow bins (“hihi, “himed”, and “hilo”), mean particle percentage ranged from 435% greater (Alternative 1 under inflow bin “himed”, 2%) to 74% less (Alternative 3 under inflow bin“"hihi”, 0%) compared to the No Action Alternative. Note that a 435% increase and 74% decrease reflect a percent different calculation.
    - Under medium Sacramento inflow bins (“medhi”, “medmed”, “medlo”), mean particle percentage ranged from 77% greater (Alternative 1 under inflow bin “medhi”, 1%) to 96% less (Alternative 3 under inflow bin “medhi”, 0%) compared to the No Action Alternative.

- Under low Sacramento inflow bins (“lohi”, “lomed”, “lolo”), mean particle percentage ranged from 42% greater (Alternative 2 without TUCP All VA under inflow bin “lolo”, 4%) to 90% less (Alternative 3 under inflow bin “lomed”, 0%) compared to the No Action Alternative.

I.8.4.2.2 Surface Oriented, Inflow Bins: Table I.8-47 through Table I.8-55 (EIS)

2 injection regions were selected for surface-oriented particles grouped by inflow bins as representative of medium frequency of a medium proportion in the Bay Delta: the *Western Delta Region* and *Yolo Bypass Region*. The following narrative is percent of particles injected in the *Western Delta Region* and *Yolo Bypass Region* with a fate at Entrained at Exports.

- **Injection region:** *Western Delta Region*
    - Under high Sacramento inflow bins (“hihi, “himed”, and “hilo”), mean particle percentage ranged from 2262% greater (Alternative 1 under Inflow bin “hihi”, 0%) to 64% less (Alternative 3 under Inflow bin “hihi”, 0%) compared to the No Action Alternative. Note that a 2262% increase and 64% decrease reflect a percent different calculation.
    - Under medium Sacramento inflow bins (“medhi”, “medmed”, “medlo”), mean particle percentage ranged from 211% greater (Alternative 1 under Inflow bin “medhi”, 1%) to 98% less (Alternative 3 under Inflow bin “medhi”, 0%) compared to the No Action Alternative. Note that a 211% increase and 98% decrease reflect a percent difference calculation.
    - Under low Sacramento inflow bins (“lohi”, “lomed”, “lolo”), mean particle percentage ranged from 31% greater (Alternative 1 under Inflow bin “lomed”, 3%) to 94% less (Alternative 4 under inflow bin “lohi”, 0%) compared to the No Action Alternative.
- **Injection region:** *Yolo Bypass Region*
    - Under high Sacramento inflow bins (“hihi, “himed”, and “hilo”), mean particle percentage ranged from 517% (Alternative 1 under inflow bin “himed”, 4%) to 40% less (Alternative 3 under inflow bin “hilo”, 1%) compared to the No Action Alternative.
    - Under medium Sacramento inflow bins (“medhi”, “medmed”, “medlo”), mean particle percentage ranged from 131% greater (Alternative 1 under Inflow bin “medmed”, 8%) to 96% less (Alternative 3 under inflow bin “medhi”, 0%) compared to the No Action Alternative.
    - Under low Sacramento inflow bins (“lohi”, “lomed”, “lolo”), mean particle percentage ranged from 42% greater (Alternative 1 under inflow bin “lolo”, 10%) to 84% less (Alternative 3 under inflow bin “lohi”, 1%) compared to the No Action Alternative.

I.8.4.2.3 Neutrally Buoyant, OMR Bins: Table I.8-56 through Table I.8-64 (EIS) || Figure I.8-47 through Figure I.8-55

1 injection region was selected for neutrally buoyant particles grouped by OMR bins as representative of medium frequency of a medium proportion in the Bay Delta: the *San Joaquin River Region*. The following narrative is percent of particles injected in the *San Joaquin River Region* with a fate at *Entrained at Exports*.

- Under OMR bin -5,500 conditions, mean particle percentage was "NA" for all alternatives including the No Action Alternative excepting Alternative 1 (91%).
- Under OMR bin -5,000 conditions, mean particle percentage ranged from 9% lower (Alternative 3 and Alternative 4, 80%) to 13% lower (Alternative 2 with TUCP without VA and without TUCP without VA, 77%) compared with the No Action Alternative.
- Under OMR bin -3,500 conditions, mean particle percentage ranged from 6% greater (Alternative 4, 73%) compared with the No Action Alternative to equal to the No Action Alternative (Alternative 2 without TUCP Delta VA and Alternative 3, 69%).Under OMR bin -2,000 conditions, mean particle percentage ranged from 1% less (Alternative 2 without TUCP without VA and without TUCP All VA, 58%) to 13% lower (Alternative 3, 51%) compared with the No Action Alternative.

I.8.4.2.4 Surface Oriented, OMR Bins: Table I.8-65 through Table I.8-73 (EIS)

1 injection region was selected for surface-oriented particles grouped by OMR bins as representative of medium frequency of a medium proportion in the Bay Delta: the *Western Delta Region*. The following narrative is percent of particles injected in the *Western Delta Region* with a fate at *Entrained at Exports*.

- Under OMR bin -5,500 conditions, mean particle percentage ranged from 3% less (Alternative 2 without TUCP without VA, 14%) to 74% less (Alternative 1, 4%) compared with the No Action Alternative.
- Under OMR bin -5,000 conditions, mean particle percentage ranged from 48% greater (Alternative 1, 3%) to 74% less (Alternative 3, 0%) compared with the No Action Alternative.
- Under OMR bin -3,500 conditions, mean particle percentage ranged from 177% greater (Alternative 1, 2%) to 13% less (Alternative 2 with TUCP without VA, 1%) compared with the No Action Alternative.
- Under OMR bin -2,000 conditions, mean particle percentage ranged from 12% greater (Alternative 2 with TUCP without VA, 1%) to 65% less (Alternative 2 without TUCP Delta VA and Alternative 3, 0%) compared with the No Action Alternative.

I.8.4.3 Tables

I.8.4.3.1 Neutrally Buoyant, Inflow Bins [BA, Table I.8-2 through Table I.8-10]

Table I.8-2. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	0%	3%	4%	0%	0%	0%	0%
West of Chipps	lomed	2%	8%	13%	1%	1%	2%	2%
West of Chipps	lohi	17%	64%	59%	11%	11%	15%	16%
West of Chipps	medlo	0%	17%	25%	0%	0%	0%	0%
West of Chipps	medmed	3%	32%	38%	1%	2%	6%	6%
West of Chipps	medhi	33%	80%	79%	20%	21%	29%	27%
West of Chipps	hilo	1%	26%	N/A	0%	0%	N/A	N/A
West of Chipps	himed	7%	67%	53%	4%	4%	12%	13%
West of Chipps	hihi	50%	96%	95%	44%	43%	50%	50%
Entrained at Exports	lolo	61%	0%	1%	62%	65%	67%	68%
Entrained at Exports	lomed	70%	0%	0%	70%	71%	68%	68%
Entrained at Exports	lohi	63%	0%	0%	71%	70%	68%	68%
Entrained at Exports	medlo	86%	0%	0%	84%	84%	85%	83%
Entrained at Exports	medmed	77%	0%	0%	80%	80%	69%	69%
Entrained at Exports	medhi	53%	0%	0%	66%	66%	59%	60%
Entrained at Exports	hilo	89%	0%	N/A	90%	90%	N/A	N/A
Entrained at Exports	himed	80%	0%	0%	82%	82%	70%	70%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
Entrained at Exports	hihi	45%	0%	0%	52%	52%	45%	46%
Remaining in Delta	lolo	39%	97%	96%	38%	35%	32%	31%
Remaining in Delta	lomed	28%	92%	87%	29%	29%	30%	30%
Remaining in Delta	lohi	20%	36%	41%	17%	18%	17%	15%
Remaining in Delta	medlo	13%	82%	75%	16%	16%	15%	16%
Remaining in Delta	medmed	19%	68%	62%	18%	19%	25%	25%
Remaining in Delta	medhi	14%	20%	21%	13%	13%	12%	13%
Remaining in Delta	hilo	10%	74%	N/A	10%	10%	N/A	N/A
Remaining in Delta	himed	13%	33%	47%	13%	13%	17%	17%
Remaining in Delta	hihi	5%	4%	5%	5%	5%	5%	5%
Crossed SJR to South Delta	lolo	54%	21%	25%	55%	56%	58%	58%
Crossed SJR to South Delta	lomed	55%	14%	15%	55%	55%	54%	54%
Crossed SJR to South Delta	lohi	46%	-16%	-11%	53%	52%	49%	49%
Crossed SJR to South Delta	medlo	67%	11%	8%	65%	65%	66%	65%
Crossed SJR to South Delta	medmed	57%	1%	-1%	59%	59%	53%	53%
Crossed SJR to South Delta	medhi	33%	-20%	-17%	46%	45%	38%	39%
Crossed SJR to South Delta	hilo	58%	4%	N/A	59%	59%	N/A	N/A
Crossed SJR to South Delta	himed	55%	-13%	-6%	57%	57%	48%	48%
Crossed SJR to South Delta	hihi	21%	-26%	-25%	27%	27%	21%	21%

Table I.8-3. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	7%	22%	22%	6%	7%	7%	7%
West of Chipps	lomed	9%	24%	33%	8%	8%	10%	10%
West of Chipps	lohi	14%	67%	65%	10%	11%	13%	13%
West of Chipps	medlo	5%	44%	51%	5%	6%	6%	6%
West of Chipps	medmed	10%	51%	57%	9%	9%	13%	14%
West of Chipps	medhi	25%	80%	80%	15%	15%	22%	21%
West of Chipps	hilo	9%	59%	#N/A	10%	10%	#N/A	#N/A
West of Chipps	himed	13%	73%	66%	12%	12%	16%	16%
West of Chipps	hihi	35%	96%	95%	31%	30%	35%	35%
Entrained at Exports	lolo	75%	0%	1%	77%	78%	78%	78%
Entrained at Exports	lomed	79%	0%	0%	79%	80%	78%	78%
Entrained at Exports	lohi	77%	0%	0%	82%	81%	78%	78%
Entrained at Exports	medlo	88%	0%	0%	87%	87%	87%	86%
Entrained at Exports	medmed	83%	0%	0%	84%	84%	77%	77%
Entrained at Exports	medhi	63%	0%	0%	79%	79%	70%	71%
Entrained at Exports	hilo	90%	0%	#N/A	89%	89%	#N/A	#N/A
Entrained at Exports	himed	83%	0%	0%	85%	85%	79%	79%
Entrained at Exports	hihi	59%	0%	0%	65%	65%	60%	60%
Remaining in Delta	lolo	18%	78%	77%	17%	15%	15%	15%
Remaining in Delta	lomed	13%	76%	67%	13%	12%	12%	12%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	10%	33%	35%	8%	8%	9%	9%
Remaining in Delta	medlo	7%	56%	49%	8%	7%	8%	8%
Remaining in Delta	medmed	7%	49%	43%	7%	7%	9%	9%
Remaining in Delta	medhi	12%	20%	20%	6%	6%	8%	8%
Remaining in Delta	hilo	1%	41%	#N/A	1%	1%	#N/A	#N/A
Remaining in Delta	himed	4%	27%	33%	3%	3%	5%	5%
Remaining in Delta	hihi	6%	4%	5%	4%	4%	5%	5%
Crossed SJR to South Delta	lolo	-13%	-50%	-47%	-12%	-12%	-12%	-12%
Crossed SJR to South Delta	lomed	-13%	-61%	-60%	-12%	-12%	-14%	-14%
Crossed SJR to South Delta	lohi	-16%	-88%	-83%	-12%	-13%	-16%	-16%
Crossed SJR to South Delta	medlo	-7%	-66%	-69%	-8%	-8%	-8%	-8%
Crossed SJR to South Delta	medmed	-12%	-74%	-75%	-11%	-11%	-16%	-16%
Crossed SJR to South Delta	medhi	-27%	-92%	-89%	-17%	-17%	-24%	-23%
Crossed SJR to South Delta	hilo	-10%	-77%	#N/A	-10%	-10%	#N/A	#N/A
Crossed SJR to South Delta	himed	-13%	-84%	-80%	-12%	-12%	-17%	-17%
Crossed SJR to South Delta	hihi	-36%	-98%	-97%	-31%	-31%	-36%	-36%

Table I.8-4. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	0%	5%	5%	0%	0%	0%	0%
West of Chipps	lomed	0%	8%	13%	0%	0%	0%	0%
West of Chipps	lohi	0%	54%	49%	0%	0%	1%	1%
West of Chipps	medlo	0%	22%	29%	0%	0%	0%	0%
West of Chipps	medmed	0%	30%	35%	0%	0%	0%	0%
West of Chipps	medhi	2%	68%	68%	1%	1%	2%	2%
West of Chipps	hilo	0%	38%	#N/A	0%	0%	#N/A	#N/A
West of Chipps	himed	0%	56%	47%	0%	0%	0%	0%
West of Chipps	hihi	6%	92%	89%	5%	5%	6%	6%
Entrained at Exports	lolo	98%	1%	3%	98%	98%	98%	98%
Entrained at Exports	lomed	100%	0%	0%	100%	100%	100%	100%
Entrained at Exports	lohi	100%	0%	0%	100%	100%	98%	98%
Entrained at Exports	medlo	99%	1%	0%	98%	99%	98%	99%
Entrained at Exports	medmed	100%	0%	0%	100%	100%	100%	100%
Entrained at Exports	medhi	95%	0%	0%	99%	99%	96%	96%
Entrained at Exports	hilo	100%	0%	#N/A	100%	100%	#N/A	#N/A
Entrained at Exports	himed	100%	0%	0%	100%	100%	100%	100%
Entrained at Exports	hihi	94%	0%	0%	94%	94%	93%	93%
Remaining in Delta	lolo	2%	94%	92%	2%	2%	2%	2%
Remaining in Delta	lomed	0%	92%	87%	0%	0%	0%	0%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	0%	46%	51%	0%	0%	1%	1%
Remaining in Delta	medlo	1%	77%	71%	2%	1%	2%	1%
Remaining in Delta	medmed	0%	70%	65%	0%	0%	0%	0%
Remaining in Delta	medhi	2%	32%	32%	0%	0%	2%	2%
Remaining in Delta	hilo	0%	62%	#N/A	0%	0%	#N/A	#N/A
Remaining in Delta	himed	0%	44%	53%	0%	0%	0%	0%
Remaining in Delta	hihi	1%	8%	11%	1%	1%	1%	1%
Crossed SJR to South Delta	lolo	0%	-22%	-20%	0%	0%	0%	0%
Crossed SJR to South Delta	lomed	0%	-38%	-36%	0%	0%	0%	0%
Crossed SJR to South Delta	lohi	0%	-79%	-70%	0%	0%	-1%	-1%
Crossed SJR to South Delta	medlo	0%	-42%	-47%	0%	0%	0%	0%
Crossed SJR to South Delta	medmed	0%	-55%	-57%	0%	0%	0%	0%
Crossed SJR to South Delta	medhi	-3%	-83%	-80%	-1%	-1%	-3%	-2%
Crossed SJR to South Delta	hilo	0%	-59%	#N/A	0%	0%	#N/A	#N/A
Crossed SJR to South Delta	himed	0%	-71%	-64%	0%	0%	0%	0%
Crossed SJR to South Delta	hihi	-6%	-94%	-93%	-6%	-6%	-6%	-6%

Table I.8-5. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	30%	49%	48%	28%	31%	33%	34%
West of Chipps	lomed	40%	51%	65%	36%	37%	43%	44%
West of Chipps	lohi	65%	89%	90%	57%	57%	61%	62%
West of Chipps	medlo	32%	79%	86%	34%	35%	35%	37%
West of Chipps	medmed	53%	86%	91%	48%	49%	59%	60%
West of Chipps	medhi	81%	97%	96%	72%	72%	77%	76%
West of Chipps	hilo	62%	93%	#N/A	69%	68%	#N/A	#N/A
West of Chipps	himed	73%	97%	96%	69%	69%	78%	78%
West of Chipps	hihi	93%	100%	100%	91%	91%	93%	93%
Entrained at Exports	lolo	22%	0%	0%	24%	25%	27%	28%
Entrained at Exports	lomed	25%	0%	0%	25%	25%	23%	23%
Entrained at Exports	lohi	17%	0%	0%	22%	21%	21%	21%
Entrained at Exports	medlo	47%	0%	0%	41%	41%	43%	40%
Entrained at Exports	medmed	27%	0%	0%	29%	28%	22%	21%
Entrained at Exports	medhi	10%	0%	0%	16%	16%	14%	14%
Entrained at Exports	hilo	31%	0%	#N/A	27%	27%	#N/A	#N/A
Entrained at Exports	himed	21%	0%	0%	22%	22%	15%	15%
Entrained at Exports	hihi	5%	0%	0%	7%	7%	5%	5%
Remaining in Delta	lolo	48%	51%	52%	48%	44%	40%	38%
Remaining in Delta	lomed	35%	49%	35%	40%	38%	34%	33%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	18%	11%	10%	21%	21%	18%	17%
Remaining in Delta	medlo	21%	21%	14%	25%	24%	22%	23%
Remaining in Delta	medmed	20%	14%	9%	23%	23%	19%	19%
Remaining in Delta	medhi	9%	3%	4%	12%	12%	9%	10%
Remaining in Delta	hilo	7%	7%	#N/A	5%	5%	#N/A	#N/A
Remaining in Delta	himed	7%	3%	4%	9%	8%	7%	7%
Remaining in Delta	hihi	2%	0%	0%	2%	2%	2%	2%
Crossed SJR to South Delta	lolo	43%	16%	18%	44%	44%	45%	45%
Crossed SJR to South Delta	lomed	40%	13%	11%	41%	41%	38%	38%
Crossed SJR to South Delta	lohi	24%	2%	2%	30%	29%	28%	28%
Crossed SJR to South Delta	medlo	57%	7%	5%	51%	51%	53%	51%
Crossed SJR to South Delta	medmed	37%	4%	3%	39%	39%	31%	30%
Crossed SJR to South Delta	medhi	14%	1%	1%	21%	21%	18%	19%
Crossed SJR to South Delta	hilo	35%	2%	#N/A	29%	30%	#N/A	#N/A
Crossed SJR to South Delta	himed	24%	1%	1%	27%	27%	19%	19%
Crossed SJR to South Delta	hihi	6%	0%	0%	8%	8%	6%	6%

Table I.8-6. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	51%	68%	65%	51%	56%	57%	58%
West of Chipps	lomed	68%	66%	79%	67%	69%	71%	72%
West of Chipps	lohi	82%	88%	91%	80%	80%	81%	80%
West of Chipps	medlo	62%	93%	95%	65%	66%	64%	67%
West of Chipps	medmed	84%	95%	97%	83%	84%	86%	87%
West of Chipps	medhi	94%	97%	97%	92%	92%	93%	92%
West of Chipps	hilo	95%	98%	#N/A	96%	96%	#N/A	#N/A
West of Chipps	himed	96%	99%	99%	96%	96%	97%	97%
West of Chipps	hihi	99%	100%	100%	99%	99%	99%	99%
Entrained at Exports	lolo	7%	0%	0%	7%	7%	9%	9%
Entrained at Exports	lomed	7%	0%	0%	6%	6%	6%	6%
Entrained at Exports	lohi	4%	0%	0%	5%	5%	5%	5%
Entrained at Exports	medlo	16%	0%	0%	11%	11%	14%	12%
Entrained at Exports	medmed	5%	0%	0%	5%	5%	4%	4%
Entrained at Exports	medhi	2%	0%	0%	2%	2%	2%	2%
Entrained at Exports	hilo	3%	0%	#N/A	2%	2%	#N/A	#N/A
Entrained at Exports	himed	2%	0%	0%	2%	2%	1%	1%
Entrained at Exports	hihi	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	lolo	42%	32%	35%	42%	37%	35%	33%
Remaining in Delta	lomed	25%	34%	21%	28%	25%	22%	22%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	14%	12%	9%	16%	16%	14%	15%
Remaining in Delta	medlo	23%	7%	5%	24%	23%	22%	21%
Remaining in Delta	medmed	10%	5%	3%	12%	12%	9%	9%
Remaining in Delta	medhi	5%	3%	3%	6%	6%	5%	6%
Remaining in Delta	hilo	2%	2%	#N/A	1%	2%	#N/A	#N/A
Remaining in Delta	himed	2%	1%	1%	2%	2%	2%	2%
Remaining in Delta	hihi	1%	0%	0%	1%	1%	1%	1%
Crossed SJR to South Delta	lolo	17%	7%	8%	16%	15%	18%	18%
Crossed SJR to South Delta	lomed	13%	6%	4%	12%	12%	12%	12%
Crossed SJR to South Delta	lohi	7%	1%	1%	8%	7%	8%	8%
Crossed SJR to South Delta	medlo	22%	1%	1%	17%	16%	20%	18%
Crossed SJR to South Delta	medmed	8%	1%	0%	8%	8%	7%	7%
Crossed SJR to South Delta	medhi	2%	0%	0%	3%	3%	3%	3%
Crossed SJR to South Delta	hilo	4%	0%	#N/A	3%	3%	#N/A	#N/A
Crossed SJR to South Delta	himed	2%	0%	0%	2%	3%	2%	2%
Crossed SJR to South Delta	hihi	0%	0%	0%	1%	1%	0%	0%

Table I.8-7. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	10%	19%	19%	9%	11%	13%	13%
West of Chipps	lomed	17%	20%	34%	13%	14%	19%	20%
West of Chipps	lohi	44%	65%	69%	35%	35%	40%	43%
West of Chipps	medlo	13%	50%	63%	14%	14%	15%	16%
West of Chipps	medmed	28%	62%	76%	23%	24%	36%	37%
West of Chipps	medhi	67%	87%	90%	54%	55%	63%	61%
West of Chipps	hilo	41%	72%	#N/A	49%	49%	#N/A	#N/A
West of Chipps	himed	54%	90%	88%	48%	49%	61%	62%
West of Chipps	hihi	88%	98%	98%	84%	84%	88%	88%
Entrained at Exports	lolo	24%	0%	0%	27%	29%	32%	34%
Entrained at Exports	lomed	30%	0%	0%	28%	28%	27%	27%
Entrained at Exports	lohi	23%	0%	0%	30%	29%	29%	29%
Entrained at Exports	medlo	62%	0%	0%	55%	55%	57%	53%
Entrained at Exports	medmed	36%	0%	0%	37%	37%	28%	27%
Entrained at Exports	medhi	15%	0%	0%	23%	22%	19%	20%
Entrained at Exports	hilo	43%	0%	#N/A	40%	41%	#N/A	#N/A
Entrained at Exports	himed	31%	0%	0%	33%	33%	22%	22%
Entrained at Exports	hihi	8%	0%	0%	11%	11%	8%	8%
Remaining in Delta	lolo	66%	81%	81%	63%	61%	56%	53%
Remaining in Delta	lomed	53%	80%	66%	59%	58%	54%	53%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	33%	35%	31%	35%	36%	31%	28%
Remaining in Delta	medlo	25%	50%	37%	31%	31%	28%	32%
Remaining in Delta	medmed	36%	38%	24%	39%	39%	36%	36%
Remaining in Delta	medhi	18%	13%	10%	24%	23%	18%	19%
Remaining in Delta	hilo	15%	28%	#N/A	11%	11%	#N/A	#N/A
Remaining in Delta	himed	16%	10%	12%	19%	19%	16%	16%
Remaining in Delta	hihi	4%	2%	2%	5%	5%	4%	4%
Crossed SJR to South Delta	lolo	52%	23%	21%	53%	54%	55%	56%
Crossed SJR to South Delta	lomed	53%	21%	19%	54%	54%	51%	51%
Crossed SJR to South Delta	lohi	36%	6%	6%	43%	42%	41%	40%
Crossed SJR to South Delta	medlo	74%	15%	12%	69%	69%	70%	68%
Crossed SJR to South Delta	medmed	53%	10%	7%	56%	55%	44%	44%
Crossed SJR to South Delta	medhi	22%	2%	2%	32%	31%	27%	28%
Crossed SJR to South Delta	hilo	52%	8%	#N/A	46%	46%	#N/A	#N/A
Crossed SJR to South Delta	himed	39%	3%	4%	42%	42%	31%	31%
Crossed SJR to South Delta	hihi	10%	0%	0%	13%	13%	10%	10%

Table I.8-8. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	24%	32%	31%	23%	25%	27%	27%
West of Chipps	lomed	35%	28%	39%	32%	33%	37%	37%
West of Chipps	lohi	41%	42%	47%	37%	37%	40%	39%
West of Chipps	medlo	31%	54%	62%	32%	33%	33%	35%
West of Chipps	medmed	50%	55%	61%	46%	46%	51%	51%
West of Chipps	medhi	53%	55%	57%	49%	50%	53%	52%
West of Chipps	hilo	70%	69%	#N/A	66%	66%	#N/A	#N/A
West of Chipps	himed	68%	68%	68%	63%	63%	68%	68%
West of Chipps	hihi	68%	68%	69%	62%	62%	68%	68%
Entrained at Exports	lolo	2%	0%	0%	2%	2%	3%	4%
Entrained at Exports	lomed	3%	0%	0%	2%	2%	2%	3%
Entrained at Exports	lohi	2%	0%	0%	2%	2%	2%	2%
Entrained at Exports	medlo	6%	0%	0%	4%	4%	5%	4%
Entrained at Exports	medmed	2%	0%	0%	1%	1%	2%	1%
Entrained at Exports	medhi	1%	0%	0%	1%	1%	1%	1%
Entrained at Exports	hilo	1%	0%	#N/A	0%	0%	#N/A	#N/A
Entrained at Exports	himed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hihi	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	lolo	74%	68%	69%	75%	73%	70%	69%
Remaining in Delta	lomed	62%	72%	61%	66%	65%	61%	60%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	58%	58%	53%	61%	61%	58%	59%
Remaining in Delta	medlo	63%	46%	38%	64%	64%	62%	61%
Remaining in Delta	medmed	48%	45%	39%	52%	52%	47%	47%
Remaining in Delta	medhi	46%	45%	43%	50%	50%	46%	47%
Remaining in Delta	hilo	30%	31%	#N/A	34%	34%	#N/A	#N/A
Remaining in Delta	himed	32%	32%	32%	37%	37%	32%	31%
Remaining in Delta	hihi	32%	32%	31%	38%	38%	32%	32%
Crossed SJR to South Delta	lolo	9%	5%	5%	8%	7%	9%	9%
Crossed SJR to South Delta	lomed	7%	4%	3%	6%	6%	7%	7%
Crossed SJR to South Delta	lohi	4%	1%	1%	4%	4%	5%	5%
Crossed SJR to South Delta	medlo	11%	1%	1%	7%	7%	10%	8%
Crossed SJR to South Delta	medmed	4%	1%	1%	4%	4%	4%	3%
Crossed SJR to South Delta	medhi	1%	0%	0%	2%	1%	2%	2%
Crossed SJR to South Delta	hilo	1%	0%	#N/A	1%	1%	#N/A	#N/A
Crossed SJR to South Delta	himed	1%	0%	0%	1%	1%	1%	1%
Crossed SJR to South Delta	hihi	0%	0%	0%	0%	0%	0%	0%

Table I.8-9. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	86%	93%	93%	86%	89%	89%	90%
West of Chipps	lomed	93%	93%	97%	93%	93%	94%	94%
West of Chipps	lohi	98%	99%	99%	97%	97%	97%	97%
West of Chipps	medlo	91%	99%	99%	92%	92%	92%	93%
West of Chipps	medmed	97%	99%	99%	97%	97%	98%	98%
West of Chipps	medhi	99%	99%	99%	99%	99%	99%	99%
West of Chipps	hilo	99%	100%	#N/A	100%	100%	#N/A	#N/A
West of Chipps	himed	100%	100%	100%	100%	100%	100%	100%
West of Chipps	hihi	100%	100%	100%	100%	100%	100%	100%
Entrained at Exports	lolo	1%	0%	0%	1%	1%	1%	1%
Entrained at Exports	lomed	1%	0%	0%	1%	1%	1%	1%
Entrained at Exports	lohi	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	medlo	2%	0%	0%	1%	1%	2%	1%
Entrained at Exports	medmed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	medhi	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hilo	0%	0%	#N/A	0%	0%	#N/A	#N/A
Entrained at Exports	himed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hihi	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	lolo	13%	7%	7%	13%	10%	10%	9%
Remaining in Delta	lomed	6%	7%	3%	7%	6%	5%	5%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	2%	1%	1%	3%	3%	2%	2%
Remaining in Delta	medlo	7%	1%	1%	7%	7%	6%	5%
Remaining in Delta	medmed	2%	1%	1%	2%	2%	2%	2%
Remaining in Delta	medhi	1%	1%	1%	1%	1%	1%	1%
Remaining in Delta	hilo	0%	0%	#N/A	0%	0%	#N/A	#N/A
Remaining in Delta	himed	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	hihi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	lolo	3%	1%	1%	2%	2%	3%	3%
Crossed SJR to South Delta	lomed	2%	1%	0%	1%	1%	2%	2%
Crossed SJR to South Delta	lohi	0%	0%	0%	1%	1%	1%	1%
Crossed SJR to South Delta	medlo	3%	0%	0%	2%	2%	3%	2%
Crossed SJR to South Delta	medmed	1%	0%	0%	1%	1%	1%	1%
Crossed SJR to South Delta	medhi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hilo	0%	0%	#N/A	0%	0%	#N/A	#N/A
Crossed SJR to South Delta	himed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hihi	0%	0%	0%	0%	0%	0%	0%

Table I.8-10. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	67%	60%	58%	64%	61%	65%	65%
West of Chipps	lomed	64%	57%	60%	63%	62%	64%	63%
West of Chipps	lohi	63%	66%	67%	61%	61%	62%	63%
West of Chipps	medlo	73%	73%	78%	73%	74%	76%	72%
West of Chipps	medmed	73%	76%	82%	71%	71%	74%	74%
West of Chipps	medhi	77%	82%	84%	75%	75%	77%	75%
West of Chipps	hilo	93%	92%	#N/A	95%	95%	#N/A	#N/A
West of Chipps	himed	94%	95%	95%	93%	93%	94%	95%
West of Chipps	hihi	97%	98%	98%	97%	97%	97%	97%
Entrained at Exports	lolo	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	lomed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	lohi	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	medlo	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	medmed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	medhi	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hilo	0%	0%	#N/A	0%	0%	#N/A	#N/A
Entrained at Exports	himed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hihi	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	lolo	33%	40%	42%	36%	39%	35%	35%
Remaining in Delta	lomed	36%	43%	40%	37%	38%	36%	37%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	37%	34%	33%	39%	39%	38%	37%
Remaining in Delta	medlo	27%	27%	22%	27%	26%	24%	28%
Remaining in Delta	medmed	27%	24%	18%	29%	29%	26%	26%
Remaining in Delta	medhi	23%	18%	16%	25%	25%	23%	25%
Remaining in Delta	hilo	7%	8%	#N/A	5%	5%	#N/A	#N/A
Remaining in Delta	himed	6%	5%	5%	7%	7%	6%	5%
Remaining in Delta	hihi	3%	2%	2%	3%	3%	3%	3%
Crossed SJR to South Delta	lolo	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	lomed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	lohi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	medlo	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	medmed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	medhi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hilo	0%	0%	#N/A	0%	0%	#N/A	#N/A
Crossed SJR to South Delta	himed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hihi	0%	0%	0%	0%	0%	0%	0%

I.8.4.3.2 Surface Oriented, Inflow Bins [BA, Table I.8-11 through Table I.8-19]

Table I.8-11. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	0%	17%	20%	1%	1%	1%	1%
West of Chipps	lomed	1%	35%	37%	1%	1%	2%	2%
West of Chipps	lohi	1%	#N/A	61%	3%	4%	2%	2%
West of Chipps	medlo	0%	33%	30%	1%	1%	1%	1%
West of Chipps	medmed	2%	51%	46%	2%	2%	5%	5%
West of Chipps	medhi	13%	92%	90%	12%	12%	19%	19%
West of Chipps	hilo	2%	45%	43%	2%	2%	2%	2%
West of Chipps	himed	6%	76%	69%	6%	6%	8%	8%
West of Chipps	hihi	39%	98%	96%	37%	38%	40%	39%
Entrained at Exports	lolo	78%	0%	0%	78%	77%	77%	77%
Entrained at Exports	lomed	84%	0%	0%	80%	80%	71%	71%
Entrained at Exports	lohi	86%	#N/A	0%	80%	76%	85%	84%
Entrained at Exports	medlo	90%	0%	0%	88%	88%	88%	87%
Entrained at Exports	medmed	88%	0%	0%	88%	87%	78%	78%
Entrained at Exports	medhi	79%	0%	0%	81%	81%	71%	71%
Entrained at Exports	hilo	91%	0%	0%	91%	91%	91%	91%
Entrained at Exports	himed	89%	0%	0%	89%	89%	85%	85%
Entrained at Exports	hihi	59%	0%	0%	61%	61%	58%	58%
Remaining in Delta	lolo	22%	83%	80%	21%	23%	22%	22%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lomed	16%	65%	63%	20%	20%	27%	27%
Remaining in Delta	lohi	12%	#N/A	39%	17%	19%	13%	14%
Remaining in Delta	medlo	10%	67%	70%	12%	12%	12%	12%
Remaining in Delta	medmed	10%	49%	54%	10%	11%	17%	17%
Remaining in Delta	medhi	8%	8%	10%	7%	7%	10%	10%
Remaining in Delta	hilo	7%	54%	56%	7%	7%	7%	7%
Remaining in Delta	himed	5%	23%	31%	5%	5%	7%	7%
Remaining in Delta	hihi	2%	2%	4%	2%	2%	2%	2%
Crossed SJR to South Delta	lolo	51%	10%	6%	51%	50%	50%	50%
Crossed SJR to South Delta	lomed	56%	-6%	-5%	55%	55%	51%	51%
Crossed SJR to South Delta	lohi	61%	#N/A	-15%	57%	54%	60%	60%
Crossed SJR to South Delta	medlo	54%	3%	4%	54%	54%	54%	54%
Crossed SJR to South Delta	medmed	59%	-9%	-5%	60%	59%	54%	54%
Crossed SJR to South Delta	medhi	55%	-24%	-23%	56%	56%	48%	48%
Crossed SJR to South Delta	hilo	56%	-1%	1%	56%	56%	56%	56%
Crossed SJR to South Delta	himed	57%	-17%	-14%	57%	57%	55%	55%
Crossed SJR to South Delta	hihi	32%	-26%	-25%	33%	33%	31%	31%

Table I.8-12. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	6%	47%	49%	6%	6%	6%	6%
West of Chipps	lomed	5%	55%	58%	6%	7%	10%	10%
West of Chipps	lohi	4%	#N/A	72%	5%	6%	4%	4%
West of Chipps	medlo	5%	59%	57%	5%	5%	5%	5%
West of Chipps	medmed	7%	67%	64%	7%	8%	10%	11%
West of Chipps	medhi	11%	93%	90%	11%	11%	13%	13%
West of Chipps	hilo	8%	65%	64%	8%	8%	8%	8%
West of Chipps	himed	10%	80%	76%	10%	10%	11%	11%
West of Chipps	hihi	26%	97%	96%	26%	26%	27%	27%
Entrained at Exports	lolo	86%	0%	0%	87%	86%	86%	86%
Entrained at Exports	lomed	89%	0%	0%	87%	85%	82%	82%
Entrained at Exports	lohi	92%	#N/A	0%	88%	86%	91%	91%
Entrained at Exports	medlo	92%	0%	0%	91%	91%	91%	91%
Entrained at Exports	medmed	90%	0%	0%	90%	89%	85%	85%
Entrained at Exports	medhi	87%	0%	0%	88%	88%	84%	84%
Entrained at Exports	hilo	90%	0%	0%	89%	90%	89%	89%
Entrained at Exports	himed	88%	0%	0%	88%	88%	87%	87%
Entrained at Exports	hihi	72%	0%	0%	73%	72%	71%	71%
Remaining in Delta	lolo	9%	53%	51%	8%	8%	8%	8%
Remaining in Delta	lomed	5%	45%	42%	7%	8%	8%	8%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	5%	#N/A	28%	7%	8%	5%	5%
Remaining in Delta	medlo	3%	41%	43%	3%	3%	3%	3%
Remaining in Delta	medmed	3%	33%	36%	3%	3%	4%	4%
Remaining in Delta	medhi	2%	7%	10%	2%	2%	3%	3%
Remaining in Delta	hilo	2%	34%	36%	2%	2%	3%	3%
Remaining in Delta	himed	2%	20%	24%	2%	2%	2%	2%
Remaining in Delta	hihi	2%	2%	4%	2%	2%	2%	2%
Crossed SJR to South Delta	lolo	-9%	-66%	-71%	-9%	-10%	-9%	-10%
Crossed SJR to South Delta	lomed	-8%	-80%	-80%	-9%	-11%	-14%	-14%
Crossed SJR to South Delta	lohi	-6%	#N/A	-88%	-10%	-11%	-6%	-6%
Crossed SJR to South Delta	medlo	-6%	-74%	-73%	-6%	-6%	-6%	-6%
Crossed SJR to South Delta	medmed	-8%	-82%	-80%	-8%	-9%	-12%	-12%
Crossed SJR to South Delta	medhi	-11%	-97%	-95%	-11%	-11%	-14%	-14%
Crossed SJR to South Delta	hilo	-8%	-76%	-75%	-8%	-8%	-8%	-8%
Crossed SJR to South Delta	himed	-10%	-88%	-85%	-11%	-11%	-12%	-12%
Crossed SJR to South Delta	hihi	-27%	-98%	-98%	-26%	-26%	-27%	-27%

Table I.8-13. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	0%	20%	25%	0%	0%	0%	0%
West of Chipps	lomed	0%	37%	39%	0%	0%	0%	0%
West of Chipps	lohi	0%	#N/A	60%	0%	0%	0%	0%
West of Chipps	medlo	0%	34%	31%	0%	0%	0%	0%
West of Chipps	medmed	0%	48%	43%	0%	0%	0%	0%
West of Chipps	medhi	0%	87%	83%	0%	0%	0%	0%
West of Chipps	hilo	0%	41%	39%	0%	0%	0%	0%
West of Chipps	himed	0%	65%	58%	0%	0%	0%	0%
West of Chipps	hihi	5%	94%	92%	4%	4%	4%	4%
Entrained at Exports	lolo	100%	1%	0%	100%	100%	100%	100%
Entrained at Exports	lomed	100%	4%	1%	100%	100%	100%	100%
Entrained at Exports	lohi	100%	#N/A	0%	100%	100%	100%	100%
Entrained at Exports	medlo	100%	1%	1%	100%	100%	100%	100%
Entrained at Exports	medmed	100%	0%	1%	100%	100%	100%	100%
Entrained at Exports	medhi	100%	0%	0%	100%	100%	100%	100%
Entrained at Exports	hilo	100%	1%	1%	100%	100%	100%	100%
Entrained at Exports	himed	100%	2%	2%	100%	100%	100%	100%
Entrained at Exports	hihi	95%	1%	1%	96%	96%	96%	96%
Remaining in Delta	lolo	0%	79%	74%	0%	0%	0%	0%
Remaining in Delta	lomed	0%	59%	60%	0%	0%	0%	0%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	0%	#N/A	40%	0%	0%	0%	0%
Remaining in Delta	medlo	0%	65%	68%	0%	0%	0%	0%
Remaining in Delta	medmed	0%	52%	56%	0%	0%	0%	0%
Remaining in Delta	medhi	0%	13%	17%	0%	0%	0%	0%
Remaining in Delta	hilo	0%	58%	60%	0%	0%	0%	0%
Remaining in Delta	himed	0%	34%	40%	0%	0%	0%	0%
Remaining in Delta	hihi	0%	6%	8%	0%	0%	0%	0%
Crossed SJR to South Delta	lolo	0%	-38%	-47%	0%	0%	0%	0%
Crossed SJR to South Delta	lomed	0%	-65%	-64%	0%	0%	0%	0%
Crossed SJR to South Delta	lohi	0%	#N/A	-79%	0%	0%	0%	0%
Crossed SJR to South Delta	medlo	0%	-51%	-49%	0%	0%	0%	0%
Crossed SJR to South Delta	medmed	0%	-67%	-62%	0%	0%	0%	0%
Crossed SJR to South Delta	medhi	0%	-93%	-90%	0%	0%	0%	0%
Crossed SJR to South Delta	hilo	0%	-54%	-52%	0%	0%	0%	0%
Crossed SJR to South Delta	himed	0%	-76%	-71%	0%	0%	0%	0%
Crossed SJR to South Delta	hihi	-5%	-95%	-94%	-4%	-4%	-4%	-4%

Table I.8-14. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	27%	77%	80%	27%	29%	27%	27%
West of Chipps	lomed	31%	82%	86%	33%	35%	43%	44%
West of Chipps	lohi	25%	#N/A	92%	28%	31%	26%	26%
West of Chipps	medlo	33%	90%	89%	33%	34%	34%	33%
West of Chipps	medmed	46%	93%	93%	46%	47%	54%	54%
West of Chipps	medhi	67%	99%	99%	67%	67%	72%	73%
West of Chipps	hilo	56%	95%	95%	55%	55%	55%	55%
West of Chipps	himed	68%	98%	98%	69%	69%	70%	70%
West of Chipps	hihi	89%	100%	100%	88%	88%	89%	89%
Entrained at Exports	lolo	46%	0%	0%	46%	44%	46%	45%
Entrained at Exports	lomed	43%	0%	0%	38%	38%	29%	29%
Entrained at Exports	lohi	49%	#N/A	0%	36%	31%	48%	47%
Entrained at Exports	medlo	56%	0%	0%	53%	53%	54%	54%
Entrained at Exports	medmed	42%	0%	0%	41%	40%	33%	33%
Entrained at Exports	medhi	26%	0%	0%	27%	27%	21%	21%
Entrained at Exports	hilo	39%	0%	0%	39%	39%	39%	40%
Entrained at Exports	himed	28%	0%	0%	27%	27%	25%	25%
Entrained at Exports	hihi	10%	0%	0%	11%	11%	10%	10%
Remaining in Delta	lolo	27%	23%	20%	26%	27%	27%	28%
Remaining in Delta	lomed	25%	18%	14%	29%	27%	28%	27%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	26%	#N/A	8%	36%	37%	27%	27%
Remaining in Delta	medlo	12%	10%	11%	13%	13%	13%	13%
Remaining in Delta	medmed	13%	7%	7%	13%	13%	14%	13%
Remaining in Delta	medhi	6%	1%	1%	6%	6%	6%	6%
Remaining in Delta	hilo	5%	5%	5%	6%	6%	6%	6%
Remaining in Delta	himed	4%	2%	2%	4%	4%	4%	4%
Remaining in Delta	hihi	1%	0%	0%	1%	1%	1%	1%
Crossed SJR to South Delta	lolo	57%	8%	6%	57%	55%	57%	56%
Crossed SJR to South Delta	lomed	54%	4%	4%	50%	48%	40%	40%
Crossed SJR to South Delta	lohi	60%	#N/A	2%	46%	42%	59%	58%
Crossed SJR to South Delta	medlo	61%	4%	4%	60%	59%	60%	60%
Crossed SJR to South Delta	medmed	48%	2%	2%	47%	47%	39%	39%
Crossed SJR to South Delta	medhi	30%	0%	0%	30%	30%	25%	25%
Crossed SJR to South Delta	hilo	42%	2%	2%	42%	42%	43%	43%
Crossed SJR to South Delta	himed	30%	1%	1%	30%	30%	28%	28%
Crossed SJR to South Delta	hihi	11%	0%	0%	11%	11%	10%	11%

Table I.8-15. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	58%	90%	91%	59%	60%	58%	58%
West of Chipps	lomed	68%	89%	94%	67%	69%	75%	75%
West of Chipps	lohi	50%	#N/A	96%	46%	48%	51%	51%
West of Chipps	medlo	76%	97%	97%	76%	76%	77%	76%
West of Chipps	medmed	84%	97%	98%	85%	85%	87%	87%
West of Chipps	medhi	94%	99%	99%	94%	93%	94%	94%
West of Chipps	hilo	93%	99%	99%	93%	93%	92%	92%
West of Chipps	himed	96%	99%	99%	96%	96%	96%	96%
West of Chipps	hihi	99%	100%	100%	99%	99%	99%	99%
Entrained at Exports	lolo	15%	0%	0%	15%	14%	15%	15%
Entrained at Exports	lomed	11%	0%	0%	9%	9%	7%	7%
Entrained at Exports	lohi	16%	#N/A	0%	12%	10%	15%	15%
Entrained at Exports	medlo	15%	0%	0%	14%	14%	14%	14%
Entrained at Exports	medmed	8%	0%	0%	8%	8%	7%	7%
Entrained at Exports	medhi	3%	0%	0%	4%	4%	3%	3%
Entrained at Exports	hilo	5%	0%	0%	5%	5%	5%	5%
Entrained at Exports	himed	3%	0%	0%	3%	3%	2%	3%
Entrained at Exports	hihi	1%	0%	0%	1%	1%	1%	1%
Remaining in Delta	lolo	27%	10%	9%	26%	26%	27%	27%
Remaining in Delta	lomed	21%	11%	6%	24%	22%	18%	18%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	34%	#N/A	4%	42%	42%	34%	34%
Remaining in Delta	medlo	9%	3%	3%	10%	10%	9%	10%
Remaining in Delta	medmed	7%	3%	2%	7%	7%	7%	7%
Remaining in Delta	medhi	3%	1%	1%	3%	3%	3%	3%
Remaining in Delta	hilo	2%	1%	1%	2%	2%	2%	2%
Remaining in Delta	himed	1%	1%	1%	1%	1%	1%	1%
Remaining in Delta	hihi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	lolo	22%	2%	2%	21%	21%	22%	21%
Crossed SJR to South Delta	lomed	16%	2%	1%	15%	14%	11%	11%
Crossed SJR to South Delta	lohi	26%	#N/A	0%	20%	18%	25%	24%
Crossed SJR to South Delta	medlo	17%	1%	1%	17%	17%	17%	17%
Crossed SJR to South Delta	medmed	10%	0%	0%	10%	10%	9%	9%
Crossed SJR to South Delta	medhi	4%	0%	0%	4%	4%	3%	3%
Crossed SJR to South Delta	hilo	6%	0%	0%	6%	6%	6%	6%
Crossed SJR to South Delta	himed	3%	0%	0%	3%	3%	3%	3%
Crossed SJR to South Delta	hihi	1%	0%	0%	1%	1%	1%	1%

Table I.8-16. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	10%	50%	53%	10%	11%	10%	10%
West of Chipps	lomed	13%	57%	66%	13%	16%	21%	22%
West of Chipps	lohi	14%	#N/A	79%	16%	19%	13%	14%
West of Chipps	medlo	14%	72%	70%	14%	15%	14%	14%
West of Chipps	medmed	25%	80%	80%	25%	26%	34%	34%
West of Chipps	medhi	50%	96%	96%	49%	49%	57%	58%
West of Chipps	hilo	34%	83%	82%	33%	34%	33%	32%
West of Chipps	himed	51%	94%	93%	51%	51%	54%	54%
West of Chipps	hihi	82%	99%	99%	81%	81%	83%	83%
Entrained at Exports	lolo	45%	0%	0%	45%	44%	45%	44%
Entrained at Exports	lomed	47%	0%	0%	41%	41%	31%	31%
Entrained at Exports	lohi	53%	#N/A	0%	43%	38%	51%	48%
Entrained at Exports	medlo	65%	0%	0%	61%	61%	61%	61%
Entrained at Exports	medmed	52%	0%	0%	51%	50%	39%	39%
Entrained at Exports	medhi	36%	0%	0%	37%	37%	28%	28%
Entrained at Exports	hilo	54%	0%	0%	54%	54%	54%	55%
Entrained at Exports	himed	41%	0%	0%	40%	40%	37%	37%
Entrained at Exports	hihi	16%	0%	0%	16%	16%	15%	15%
Remaining in Delta	lolo	45%	50%	47%	44%	46%	45%	46%
Remaining in Delta	lomed	40%	43%	34%	46%	43%	47%	47%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	34%	#N/A	21%	41%	44%	36%	38%
Remaining in Delta	medlo	21%	28%	30%	25%	25%	24%	25%
Remaining in Delta	medmed	24%	20%	20%	24%	24%	27%	27%
Remaining in Delta	medhi	14%	4%	4%	14%	14%	14%	14%
Remaining in Delta	hilo	12%	17%	18%	13%	12%	13%	13%
Remaining in Delta	himed	8%	6%	7%	9%	9%	9%	9%
Remaining in Delta	hihi	3%	1%	1%	2%	2%	3%	3%
Crossed SJR to South Delta	lolo	63%	13%	12%	63%	62%	63%	62%
Crossed SJR to South Delta	lomed	66%	11%	8%	62%	61%	52%	52%
Crossed SJR to South Delta	lohi	68%	#N/A	5%	59%	54%	68%	66%
Crossed SJR to South Delta	medlo	75%	9%	9%	72%	72%	73%	73%
Crossed SJR to South Delta	medmed	63%	5%	6%	63%	62%	53%	52%
Crossed SJR to South Delta	medhi	43%	1%	1%	43%	44%	35%	35%
Crossed SJR to South Delta	hilo	61%	5%	5%	61%	61%	61%	62%
Crossed SJR to South Delta	himed	46%	2%	2%	45%	45%	42%	42%
Crossed SJR to South Delta	hihi	17%	0%	0%	17%	17%	16%	16%

Table I.8-17. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	lolo	36%	59%	60%	37%	38%	37%	37%
West of Chipps	lomed	40%	55%	59%	39%	41%	45%	46%
West of Chipps	lohi	32%	#N/A	61%	26%	28%	33%	34%
West of Chipps	medlo	54%	68%	68%	53%	54%	55%	53%
West of Chipps	medmed	58%	66%	68%	58%	58%	59%	60%
West of Chipps	medhi	67%	73%	72%	66%	66%	67%	68%
West of Chipps	hilo	72%	75%	74%	72%	72%	72%	72%
West of Chipps	himed	76%	75%	75%	75%	75%	76%	76%
West of Chipps	hihi	78%	80%	80%	78%	78%	78%	78%
Entrained at Exports	lolo	7%	0%	0%	7%	6%	7%	6%
Entrained at Exports	lomed	5%	0%	0%	4%	4%	3%	3%
Entrained at Exports	lohi	8%	#N/A	0%	7%	6%	7%	6%
Entrained at Exports	medlo	6%	0%	0%	6%	6%	6%	6%
Entrained at Exports	medmed	3%	0%	0%	3%	3%	3%	3%
Entrained at Exports	medhi	1%	0%	0%	1%	1%	1%	1%
Entrained at Exports	hilo	1%	0%	0%	1%	2%	2%	1%
Entrained at Exports	himed	1%	0%	0%	1%	1%	1%	1%
Entrained at Exports	hihi	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	lolo	57%	41%	40%	56%	56%	56%	57%
Remaining in Delta	lomed	55%	45%	41%	57%	55%	52%	51%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	60%	#N/A	39%	67%	67%	60%	60%
Remaining in Delta	medlo	39%	32%	32%	41%	40%	39%	40%
Remaining in Delta	medmed	39%	34%	32%	39%	39%	38%	38%
Remaining in Delta	medhi	32%	27%	28%	32%	32%	32%	32%
Remaining in Delta	hilo	27%	25%	26%	27%	27%	27%	27%
Remaining in Delta	himed	24%	25%	25%	24%	24%	24%	24%
Remaining in Delta	hihi	22%	20%	20%	22%	22%	22%	22%
Crossed SJR to South Delta	lolo	12%	2%	2%	12%	11%	12%	12%
Crossed SJR to South Delta	lomed	9%	1%	1%	8%	8%	6%	6%
Crossed SJR to South Delta	lohi	14%	#N/A	1%	12%	12%	13%	13%
Crossed SJR to South Delta	medlo	9%	1%	1%	9%	9%	9%	9%
Crossed SJR to South Delta	medmed	5%	0%	0%	5%	5%	4%	4%
Crossed SJR to South Delta	medhi	2%	0%	0%	2%	2%	2%	2%
Crossed SJR to South Delta	hilo	2%	0%	0%	2%	2%	2%	2%
Crossed SJR to South Delta	himed	1%	0%	0%	1%	1%	1%	1%
Crossed SJR to South Delta	hihi	0%	0%	0%	0%	0%	0%	0%

Table I.8-18. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	86%	98%	99%	87%	87%	86%	86%
West of Chipps	lomed	92%	99%	99%	91%	92%	94%	94%
West of Chipps	lohi	84%	#N/A	99%	83%	84%	84%	84%
West of Chipps	medlo	93%	99%	99%	93%	93%	93%	93%
West of Chipps	medmed	96%	99%	99%	96%	96%	97%	97%
West of Chipps	medhi	99%	100%	100%	99%	99%	99%	99%
West of Chipps	hilo	99%	100%	100%	99%	99%	99%	99%
West of Chipps	himed	100%	100%	100%	100%	100%	100%	100%
West of Chipps	hihi	100%	100%	100%	100%	100%	100%	100%
Entrained at Exports	lolo	4%	0%	0%	4%	4%	4%	4%
Entrained at Exports	lomed	2%	0%	0%	2%	2%	1%	1%
Entrained at Exports	lohi	4%	#N/A	0%	2%	2%	4%	4%
Entrained at Exports	medlo	4%	0%	0%	4%	4%	4%	4%
Entrained at Exports	medmed	2%	0%	0%	2%	2%	1%	2%
Entrained at Exports	medhi	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hilo	0%	0%	0%	0%	0%	0%	1%
Entrained at Exports	himed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hihi	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	lolo	10%	2%	1%	9%	9%	10%	10%
Remaining in Delta	lomed	6%	1%	1%	7%	6%	5%	4%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
Remaining in Delta	lohi	12%	#N/A	1%	15%	14%	12%	12%
Remaining in Delta	medlo	3%	1%	1%	3%	3%	3%	3%
Remaining in Delta	medmed	2%	1%	1%	2%	2%	2%	2%
Remaining in Delta	medhi	1%	0%	0%	1%	1%	1%	1%
Remaining in Delta	hilo	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	himed	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	hihi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	lolo	6%	0%	0%	6%	6%	6%	6%
Crossed SJR to South Delta	lomed	3%	0%	0%	3%	3%	2%	2%
Crossed SJR to South Delta	lohi	7%	#N/A	0%	4%	3%	7%	7%
Crossed SJR to South Delta	medlo	5%	0%	0%	5%	5%	5%	5%
Crossed SJR to South Delta	medmed	2%	0%	0%	2%	2%	2%	2%
Crossed SJR to South Delta	medhi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hilo	0%	0%	0%	1%	1%	1%	1%
Crossed SJR to South Delta	himed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hihi	0%	0%	0%	0%	0%	0%	0%

Table I.8-19. Mean December through March surface-oriented particle fate by Inflow bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	lolo	89%	67%	69%	89%	89%	90%	91%
West of Chipps	lomed	78%	62%	70%	79%	81%	78%	78%
West of Chipps	lohi	83%	#N/A	70%	96%	97%	83%	83%
West of Chipps	medlo	86%	82%	80%	87%	87%	87%	87%
West of Chipps	medmed	83%	82%	84%	82%	81%	82%	83%
West of Chipps	medhi	82%	92%	91%	81%	81%	83%	83%
West of Chipps	hilo	95%	94%	94%	95%	95%	94%	95%
West of Chipps	himed	97%	97%	96%	97%	97%	97%	97%
West of Chipps	hihi	98%	99%	99%	98%	98%	98%	98%
Entrained at Exports	lolo	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	lomed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	lohi	0%	#N/A	0%	0%	0%	0%	0%
Entrained at Exports	medlo	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	medmed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	medhi	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hilo	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	himed	0%	0%	0%	0%	0%	0%	0%
Entrained at Exports	hihi	0%	0%	0%	0%	0%	0%	0%
Remaining in Delta	lolo	11%	33%	31%	11%	11%	10%	9%
Remaining in Delta	lomed	22%	38%	30%	21%	19%	22%	22%

Exit Point	Flow Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
Remaining in Delta	lohi	17%	#N/A	30%	4%	3%	17%	17%
Remaining in Delta	medlo	14%	18%	20%	13%	13%	13%	13%
Remaining in Delta	medmed	17%	18%	16%	18%	18%	18%	17%
Remaining in Delta	medhi	18%	8%	9%	19%	19%	17%	17%
Remaining in Delta	hilo	5%	6%	6%	5%	5%	6%	5%
Remaining in Delta	himed	3%	3%	4%	3%	3%	3%	3%
Remaining in Delta	hihi	2%	1%	1%	2%	2%	2%	2%
Crossed SJR to South Delta	lolo	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	lomed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	lohi	0%	#N/A	0%	0%	0%	0%	0%
Crossed SJR to South Delta	medlo	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	medmed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	medhi	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hilo	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	himed	0%	0%	0%	0%	0%	0%	0%
Crossed SJR to South Delta	hihi	0%	0%	0%	0%	0%	0%	0%

I.8.4.3.3 Neutrally Buoyant, OMR Bins [BA, Table I.8-20 through Table I.8-28]

Table I.8-20. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	-2000	10%	#N/A	#N/A	3%	4%	10%	12%
West of Chipps	-3500	20%	#N/A	#N/A	13%	13%	17%	16%
West of Chipps	-5000	2%	#N/A	#N/A	17%	17%	16%	15%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	59%	#N/A	#N/A	56%	58%	57%	58%
Entrained at Exports	-3500	69%	#N/A	#N/A	72%	72%	69%	71%
Entrained at Exports	-5000	88%	#N/A	#N/A	77%	76%	78%	79%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	31%	#N/A	#N/A	41%	38%	32%	30%
Remaining in Delta	-3500	11%	#N/A	#N/A	15%	15%	14%	13%
Remaining in Delta	-5000	10%	#N/A	#N/A	7%	7%	6%	6%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	46%	#N/A	#N/A	49%	48%	46%	45%
Crossed SJR to South Delta	-3500	46%	#N/A	#N/A	50%	50%	48%	49%
Crossed SJR to South Delta	-5000	67%	#N/A	#N/A	53%	53%	54%	55%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-21. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	13%	#N/A	#N/A	10%	10%	13%	14%
West of Chipps	-3500	13%	#N/A	#N/A	11%	12%	13%	12%
West of Chipps	-5000	6%	#N/A	#N/A	10%	10%	10%	10%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	73%	#N/A	#N/A	74%	75%	74%	73%
Entrained at Exports	-3500	83%	#N/A	#N/A	83%	83%	81%	82%
Entrained at Exports	-5000	88%	#N/A	#N/A	85%	85%	86%	86%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	14%	#N/A	#N/A	17%	15%	13%	13%
Remaining in Delta	-3500	4%	#N/A	#N/A	6%	5%	7%	6%
Remaining in Delta	-5000	6%	#N/A	#N/A	4%	4%	4%	4%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	-17%	#N/A	#N/A	-15%	-15%	-17%	-17%
Crossed SJR to South Delta	-3500	-14%	#N/A	#N/A	-13%	-13%	-14%	-14%
Crossed SJR to South Delta	-5000	-7%	#N/A	#N/A	-11%	-11%	-11%	-11%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-22. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
West of Chipps	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
West of Chipps	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	99%	#N/A	#N/A	99%	99%	99%	99%
Entrained at Exports	-3500	100%	#N/A	#N/A	100%	100%	100%	100%
Entrained at Exports	-5000	99%	#N/A	#N/A	100%	100%	100%	100%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	1%	#N/A	#N/A	1%	1%	1%	1%
Remaining in Delta	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Remaining in Delta	-5000	1%	#N/A	#N/A	0%	0%	0%	0%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-23. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	55%	#N/A	#N/A	38%	42%	55%	57%
West of Chipps	-3500	71%	#N/A	#N/A	62%	63%	64%	64%
West of Chipps	-5000	38%	#N/A	#N/A	67%	67%	66%	65%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	15%	#N/A	#N/A	14%	15%	14%	14%
Entrained at Exports	-3500	19%	#N/A	#N/A	22%	21%	21%	22%
Entrained at Exports	-5000	44%	#N/A	#N/A	23%	23%	25%	26%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	31%	#N/A	#N/A	48%	44%	31%	29%
Remaining in Delta	-3500	11%	#N/A	#N/A	16%	16%	15%	15%
Remaining in Delta	-5000	18%	#N/A	#N/A	10%	10%	9%	9%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	29%	#N/A	#N/A	35%	34%	28%	27%
Crossed SJR to South Delta	-3500	24%	#N/A	#N/A	29%	28%	28%	29%
Crossed SJR to South Delta	-5000	52%	#N/A	#N/A	27%	27%	29%	30%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-24. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	77%	#N/A	#N/A	64%	69%	76%	79%
West of Chipps	-3500	90%	#N/A	#N/A	87%	88%	86%	87%
West of Chipps	-5000	65%	#N/A	#N/A	86%	86%	85%	84%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	3%	#N/A	#N/A	3%	3%	3%	3%
Entrained at Exports	-3500	3%	#N/A	#N/A	3%	3%	4%	4%
Entrained at Exports	-5000	14%	#N/A	#N/A	5%	5%	6%	7%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	20%	#N/A	#N/A	34%	28%	21%	19%
Remaining in Delta	-3500	7%	#N/A	#N/A	9%	9%	10%	9%
Remaining in Delta	-5000	20%	#N/A	#N/A	9%	9%	9%	9%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	8%	#N/A	#N/A	11%	10%	9%	8%
Crossed SJR to South Delta	-3500	5%	#N/A	#N/A	5%	5%	6%	6%
Crossed SJR to South Delta	-5000	20%	#N/A	#N/A	7%	7%	8%	9%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-25. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	33%	#N/A	#N/A	17%	19%	34%	38%
West of Chipps	-3500	56%	#N/A	#N/A	43%	44%	46%	46%
West of Chipps	-5000	19%	#N/A	#N/A	52%	52%	52%	50%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	16%	#N/A	#N/A	13%	14%	15%	15%
Entrained at Exports	-3500	24%	#N/A	#N/A	27%	27%	27%	28%
Entrained at Exports	-5000	59%	#N/A	#N/A	34%	34%	36%	37%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	50%	#N/A	#N/A	70%	67%	51%	48%
Remaining in Delta	-3500	19%	#N/A	#N/A	29%	28%	27%	25%
Remaining in Delta	-5000	21%	#N/A	#N/A	15%	15%	13%	14%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	38%	#N/A	#N/A	42%	42%	37%	36%
Crossed SJR to South Delta	-3500	34%	#N/A	#N/A	40%	40%	39%	40%
Crossed SJR to South Delta	-5000	69%	#N/A	#N/A	40%	40%	41%	43%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-26. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	42%	#N/A	#N/A	31%	34%	43%	45%
West of Chipps	-3500	59%	#N/A	#N/A	51%	51%	52%	52%
West of Chipps	-5000	33%	#N/A	#N/A	46%	46%	49%	47%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	1%	#N/A	#N/A	1%	1%	1%	1%
Entrained at Exports	-3500	1%	#N/A	#N/A	1%	1%	1%	1%
Entrained at Exports	-5000	6%	#N/A	#N/A	2%	2%	2%	3%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	57%	#N/A	#N/A	68%	65%	56%	54%
Remaining in Delta	-3500	40%	#N/A	#N/A	48%	48%	47%	46%
Remaining in Delta	-5000	61%	#N/A	#N/A	52%	52%	49%	51%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	5%	#N/A	#N/A	5%	5%	5%	4%
Crossed SJR to South Delta	-3500	2%	#N/A	#N/A	2%	2%	3%	3%
Crossed SJR to South Delta	-5000	10%	#N/A	#N/A	3%	3%	4%	4%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-27. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	95%	#N/A	#N/A	90%	93%	95%	95%
West of Chipps	-3500	98%	#N/A	#N/A	98%	98%	97%	98%
West of Chipps	-5000	92%	#N/A	#N/A	98%	98%	98%	98%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-5000	2%	#N/A	#N/A	0%	0%	1%	1%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	5%	#N/A	#N/A	10%	7%	5%	4%
Remaining in Delta	-3500	2%	#N/A	#N/A	2%	2%	2%	2%
Remaining in Delta	-5000	6%	#N/A	#N/A	2%	2%	2%	2%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	1%	#N/A	#N/A	2%	1%	1%	1%
Crossed SJR to South Delta	-3500	1%	#N/A	#N/A	0%	0%	1%	1%
Crossed SJR to South Delta	-5000	3%	#N/A	#N/A	1%	1%	1%	1%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-28. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	69%	#N/A	#N/A	66%	62%	70%	71%
West of Chipps	-3500	86%	#N/A	#N/A	77%	78%	77%	77%
West of Chipps	-5000	73%	#N/A	#N/A	74%	74%	75%	73%
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	31%	#N/A	#N/A	34%	38%	30%	29%
Remaining in Delta	-3500	14%	#N/A	#N/A	23%	22%	23%	23%
Remaining in Delta	-5000	27%	#N/A	#N/A	26%	26%	25%	27%
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

I.8.4.3.4 Surface Oriented, OMR Bins [BA, Table I.8-29 through Table I.8-37]

Table I.8-29. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA
West of Chipps	-2000	9%	#N/A	#N/A	4%	4%	13%	14%
West of Chipps	-3500	12%	#N/A	#N/A	9%	9%	7%	7%
West of Chipps	-5000	6%	#N/A	#N/A	9%	10%	10%	9%
West of Chipps	-5500	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-2000	66%	#N/A	#N/A	69%	70%	61%	62%
Entrained at Exports	-3500	78%	#N/A	#N/A	81%	81%	82%	82%
Entrained at Exports	-5000	88%	#N/A	#N/A	85%	85%	85%	85%
Entrained at Exports	-5500	89%	#N/A	#N/A	88%	88%	88%	88%
Remaining in Delta	-2000	25%	#N/A	#N/A	27%	25%	26%	25%
Remaining in Delta	-3500	10%	#N/A	#N/A	10%	10%	11%	11%
Remaining in Delta	-5000	6%	#N/A	#N/A	5%	5%	5%	5%
Remaining in Delta	-5500	11%	#N/A	#N/A	12%	12%	12%	12%
Crossed SJR to South Delta	-2000	44%	#N/A	#N/A	47%	49%	42%	42%
Crossed SJR to South Delta	-3500	51%	#N/A	#N/A	53%	53%	53%	53%
Crossed SJR to South Delta	-5000	55%	#N/A	#N/A	53%	52%	52%	52%
Crossed SJR to South Delta	-5500	51%	#N/A	#N/A	51%	51%	52%	51%

Table I.8-30. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	10%	#N/A	#N/A	9%	10%	15%	14%
West of Chipps	-3500	11%	#N/A	#N/A	10%	10%	9%	9%
West of Chipps	-5000	7%	#N/A	#N/A	8%	8%	8%	8%
West of Chipps	-5500	1%	#N/A	#N/A	1%	1%	1%	1%
Entrained at Exports	-2000	81%	#N/A	#N/A	81%	81%	78%	78%
Entrained at Exports	-3500	86%	#N/A	#N/A	87%	87%	87%	88%
Entrained at Exports	-5000	91%	#N/A	#N/A	90%	90%	90%	90%
Entrained at Exports	-5500	97%	#N/A	#N/A	97%	97%	97%	97%
Remaining in Delta	-2000	9%	#N/A	#N/A	10%	9%	7%	8%
Remaining in Delta	-3500	3%	#N/A	#N/A	3%	3%	3%	3%
Remaining in Delta	-5000	2%	#N/A	#N/A	2%	2%	2%	2%
Remaining in Delta	-5500	2%	#N/A	#N/A	2%	2%	2%	2%
Crossed SJR to South Delta	-2000	-15%	#N/A	#N/A	-14%	-14%	-18%	-17%
Crossed SJR to South Delta	-3500	-12%	#N/A	#N/A	-11%	-11%	-10%	-10%
Crossed SJR to South Delta	-5000	-7%	#N/A	#N/A	-8%	-8%	-8%	-8%
Crossed SJR to South Delta	-5500	-2%	#N/A	#N/A	-2%	-2%	-2%	-2%

Table I.8-31. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
West of Chipps	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
West of Chipps	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
West of Chipps	-5500	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-2000	100%	#N/A	#N/A	100%	100%	100%	100%
Entrained at Exports	-3500	100%	#N/A	#N/A	100%	100%	100%	100%
Entrained at Exports	-5000	100%	#N/A	#N/A	100%	100%	100%	100%
Entrained at Exports	-5500	100%	#N/A	#N/A	100%	100%	100%	100%
Remaining in Delta	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Remaining in Delta	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Remaining in Delta	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
Remaining in Delta	-5500	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5500	0%	#N/A	#N/A	0%	0%	0%	0%

Table I.8-32. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	44%	#N/A	#N/A	40%	43%	62%	59%
West of Chipps	-3500	61%	#N/A	#N/A	60%	60%	55%	55%
West of Chipps	-5000	50%	#N/A	#N/A	54%	54%	55%	55%
West of Chipps	-5500	11%	#N/A	#N/A	12%	11%	11%	11%
Entrained at Exports	-2000	24%	#N/A	#N/A	26%	25%	15%	17%
Entrained at Exports	-3500	28%	#N/A	#N/A	29%	29%	32%	32%
Entrained at Exports	-5000	42%	#N/A	#N/A	39%	39%	39%	39%
Entrained at Exports	-5500	81%	#N/A	#N/A	80%	80%	80%	80%
Remaining in Delta	-2000	32%	#N/A	#N/A	34%	32%	23%	24%
Remaining in Delta	-3500	11%	#N/A	#N/A	11%	11%	13%	13%
Remaining in Delta	-5000	8%	#N/A	#N/A	7%	7%	6%	6%
Remaining in Delta	-5500	9%	#N/A	#N/A	8%	8%	9%	9%
Crossed SJR to South Delta	-2000	36%	#N/A	#N/A	39%	38%	25%	27%
Crossed SJR to South Delta	-3500	33%	#N/A	#N/A	35%	34%	38%	38%
Crossed SJR to South Delta	-5000	46%	#N/A	#N/A	43%	43%	42%	42%
Crossed SJR to South Delta	-5500	85%	#N/A	#N/A	84%	84%	84%	85%

Table I.8-33. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	67%	#N/A	#N/A	65%	69%	82%	79%
West of Chipps	-3500	87%	#N/A	#N/A	89%	89%	85%	85%
West of Chipps	-5000	85%	#N/A	#N/A	85%	85%	86%	86%
West of Chipps	-5500	48%	#N/A	#N/A	50%	49%	49%	49%
Entrained at Exports	-2000	6%	#N/A	#N/A	7%	6%	3%	4%
Entrained at Exports	-3500	5%	#N/A	#N/A	5%	5%	6%	6%
Entrained at Exports	-5000	9%	#N/A	#N/A	8%	8%	8%	8%
Entrained at Exports	-5500	35%	#N/A	#N/A	34%	34%	34%	34%
Remaining in Delta	-2000	27%	#N/A	#N/A	28%	25%	15%	17%
Remaining in Delta	-3500	8%	#N/A	#N/A	6%	7%	9%	9%
Remaining in Delta	-5000	7%	#N/A	#N/A	7%	6%	6%	6%
Remaining in Delta	-5500	17%	#N/A	#N/A	16%	17%	17%	17%
Crossed SJR to South Delta	-2000	12%	#N/A	#N/A	13%	12%	6%	8%
Crossed SJR to South Delta	-3500	7%	#N/A	#N/A	6%	6%	8%	8%
Crossed SJR to South Delta	-5000	11%	#N/A	#N/A	10%	10%	10%	10%
Crossed SJR to South Delta	-5500	40%	#N/A	#N/A	39%	40%	39%	39%

Table I.8-34. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	26%	#N/A	#N/A	21%	22%	44%	43%
West of Chipps	-3500	45%	#N/A	#N/A	42%	42%	38%	37%
West of Chipps	-5000	33%	#N/A	#N/A	39%	39%	40%	40%
West of Chipps	-5500	2%	#N/A	#N/A	3%	2%	2%	2%
Entrained at Exports	-2000	23%	#N/A	#N/A	25%	27%	16%	17%
Entrained at Exports	-3500	34%	#N/A	#N/A	38%	37%	39%	39%
Entrained at Exports	-5000	53%	#N/A	#N/A	48%	48%	48%	49%
Entrained at Exports	-5500	78%	#N/A	#N/A	78%	78%	79%	78%
Remaining in Delta	-2000	50%	#N/A	#N/A	54%	51%	40%	40%
Remaining in Delta	-3500	21%	#N/A	#N/A	20%	21%	23%	23%
Remaining in Delta	-5000	14%	#N/A	#N/A	13%	12%	12%	12%
Remaining in Delta	-5500	20%	#N/A	#N/A	19%	19%	19%	19%
Crossed SJR to South Delta	-2000	43%	#N/A	#N/A	46%	48%	34%	34%
Crossed SJR to South Delta	-3500	45%	#N/A	#N/A	48%	47%	50%	50%
Crossed SJR to South Delta	-5000	59%	#N/A	#N/A	54%	54%	54%	54%
Crossed SJR to South Delta	-5500	85%	#N/A	#N/A	85%	86%	86%	86%

Table I.8-35. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	42%	#N/A	#N/A	40%	43%	54%	52%
West of Chipps	-3500	61%	#N/A	#N/A	63%	63%	62%	61%
West of Chipps	-5000	65%	#N/A	#N/A	66%	66%	67%	67%
West of Chipps	-5500	34%	#N/A	#N/A	36%	36%	35%	35%
Entrained at Exports	-2000	3%	#N/A	#N/A	3%	3%	1%	1%
Entrained at Exports	-3500	2%	#N/A	#N/A	2%	2%	2%	2%
Entrained at Exports	-5000	3%	#N/A	#N/A	3%	3%	3%	3%
Entrained at Exports	-5500	16%	#N/A	#N/A	16%	16%	16%	16%
Remaining in Delta	-2000	55%	#N/A	#N/A	56%	54%	45%	46%
Remaining in Delta	-3500	37%	#N/A	#N/A	35%	35%	36%	36%
Remaining in Delta	-5000	32%	#N/A	#N/A	31%	31%	30%	29%
Remaining in Delta	-5500	49%	#N/A	#N/A	48%	48%	49%	49%
Crossed SJR to South Delta	-2000	7%	#N/A	#N/A	8%	7%	4%	4%
Crossed SJR to South Delta	-3500	3%	#N/A	#N/A	3%	3%	4%	4%
Crossed SJR to South Delta	-5000	5%	#N/A	#N/A	5%	5%	5%	5%
Crossed SJR to South Delta	-5500	22%	#N/A	#N/A	21%	21%	21%	21%

Table I.8-36. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	90%	#N/A	#N/A	90%	91%	95%	94%
West of Chipps	-3500	97%	#N/A	#N/A	98%	98%	96%	96%
West of Chipps	-5000	96%	#N/A	#N/A	96%	96%	96%	96%
West of Chipps	-5500	77%	#N/A	#N/A	78%	78%	77%	77%
Entrained at Exports	-2000	1%	#N/A	#N/A	1%	1%	0%	1%
Entrained at Exports	-3500	1%	#N/A	#N/A	1%	1%	1%	1%
Entrained at Exports	-5000	2%	#N/A	#N/A	2%	2%	2%	2%
Entrained at Exports	-5500	14%	#N/A	#N/A	14%	14%	14%	14%
Remaining in Delta	-2000	9%	#N/A	#N/A	9%	8%	4%	6%
Remaining in Delta	-3500	2%	#N/A	#N/A	2%	2%	3%	3%
Remaining in Delta	-5000	2%	#N/A	#N/A	2%	2%	2%	2%
Remaining in Delta	-5500	9%	#N/A	#N/A	8%	8%	9%	9%
Crossed SJR to South Delta	-2000	2%	#N/A	#N/A	3%	2%	1%	1%
Crossed SJR to South Delta	-3500	1%	#N/A	#N/A	1%	1%	1%	1%
Crossed SJR to South Delta	-5000	2%	#N/A	#N/A	2%	2%	2%	2%
Crossed SJR to South Delta	-5500	17%	#N/A	#N/A	16%	17%	17%	17%

Table I.8-37. Mean December through March surface-oriented particle fate by OMR bin for NAA, EXP1, EXP3, and four phases of Alternative 2 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	EXP1	EXP3	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA
West of Chipps	-2000	91%	#N/A	#N/A	88%	89%	86%	90%
West of Chipps	-3500	89%	#N/A	#N/A	88%	89%	91%	91%
West of Chipps	-5000	92%	#N/A	#N/A	94%	94%	94%	93%
West of Chipps	-5500	86%	#N/A	#N/A	87%	87%	87%	87%
Entrained at Exports	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
Entrained at Exports	-5500	0%	#N/A	#N/A	0%	0%	0%	0%
Remaining in Delta	-2000	9%	#N/A	#N/A	12%	11%	14%	10%
Remaining in Delta	-3500	11%	#N/A	#N/A	12%	11%	9%	9%
Remaining in Delta	-5000	8%	#N/A	#N/A	6%	6%	6%	7%
Remaining in Delta	-5500	14%	#N/A	#N/A	12%	12%	13%	12%
Crossed SJR to South Delta	-2000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-3500	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5000	0%	#N/A	#N/A	0%	0%	0%	0%
Crossed SJR to South Delta	-5500	0%	#N/A	#N/A	0%	0%	0%	0%

I.8.4.3.5 Neutrally Buoyant, Inflow Bins [EIS, Table I.8-38 through Table I.8-46]

Table I.8-38. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	0%	0 (-35%)	0 (-56%)	0 (-47%)	0 (14%)	0 (12%)	1 (139%)	0 (-56%)
West of Chipps	lomed	2%	1 (-35%)	1 (-57%)	1 (-50%)	2 (25%)	2 (13%)	4 (165%)	1 (-57%)
West of Chipps	lohi	17%	13 (-23%)	11 (-33%)	11 (-33%)	15 (-10%)	16 (-4%)	18 (5%)	11 (-33%)
West of Chipps	medlo	0%	0 (-47%)	0 (-18%)	0 (-24%)	0 (25%)	0 (80%)	3 (2157%)	0 (-19%)
West of Chipps	medmed	3%	1 (-71%)	1 (-54%)	2 (-50%)	6 (81%)	6 (95%)	15 (365%)	1 (-57%)
West of Chipps	medhi	33%	16 (-53%)	20 (-38%)	21 (-37%)	29 (-13%)	27 (-17%)	52 (58%)	20 (-39%)
West of Chipps	hilo	1%	0 (-86%)	0 (-42%)	0 (-36%)	#N/A	#N/A	1 (-23%)	0 (-62%)
West of Chipps	himed	7%	1 (-90%)	4 (-37%)	4 (-41%)	12 (75%)	13 (81%)	24 (239%)	4 (-43%)
West of Chipps	hihi	50%	41 (-18%)	44 (-13%)	43 (-13%)	50 (0%)	50 (-1%)	70 (41%)	43 (-14%)
Entrained at Exports	lolo	61%	60 (-1%)	62 (3%)	65 (7%)	67 (11%)	68 (12%)	42 (-31%)	62 (3%)
Entrained at Exports	lomed	70%	72 (3%)	70 (1%)	71 (1%)	68 (-3%)	68 (-3%)	38 (-45%)	71 (1%)
Entrained at Exports	lohi	63%	70 (11%)	71 (13%)	70 (12%)	68 (8%)	68 (8%)	49 (-22%)	71 (13%)
Entrained at Exports	medlo	86%	86 (-1%)	84 (-3%)	84 (-3%)	85 (-2%)	83 (-4%)	49 (-43%)	84 (-3%)
Entrained at Exports	medmed	77%	88 (14%)	80 (4%)	80 (3%)	69 (-10%)	69 (-11%)	34 (-56%)	81 (4%)
Entrained at Exports	medhi	53%	73 (38%)	66 (26%)	66 (25%)	59 (12%)	60 (14%)	21 (-60%)	67 (26%)
Entrained at Exports	hilo	89%	91 (2%)	90 (0%)	90 (0%)	#N/A	#N/A	82 (-9%)	92 (2%)
Entrained at Exports	himed	80%	95 (18%)	82 (2%)	82 (3%)	70 (-13%)	70 (-13%)	46 (-43%)	83 (4%)
Entrained at Exports	hihi	45%	55 (22%)	52 (15%)	52 (15%)	45 (1%)	46 (1%)	22 (-52%)	53 (17%)
Remaining in Delta	lolo	39%	40 (3%)	38 (-4%)	35 (-10%)	32 (-17%)	31 (-19%)	57 (47%)	38 (-3%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lomed	28%	27 (-5%)	29 (2%)	29 (0%)	30 (6%)	30 (6%)	57 (102%)	28 (0%)
Remaining in Delta	lohi	20%	17 (-16%)	17 (-14%)	18 (-9%)	17 (-17%)	15 (-23%)	33 (64%)	17 (-13%)
Remaining in Delta	medlo	13%	14 (6%)	16 (22%)	16 (18%)	15 (12%)	16 (23%)	48 (260%)	16 (18%)
Remaining in Delta	medmed	19%	11 (-44%)	18 (-7%)	19 (-4%)	25 (27%)	25 (28%)	51 (164%)	18 (-8%)
Remaining in Delta	medhi	14%	12 (-19%)	13 (-6%)	13 (-7%)	12 (-14%)	13 (-10%)	26 (85%)	13 (-8%)
Remaining in Delta	hilo	10%	9 (-12%)	10 (-1%)	10 (0%)	#N/A	#N/A	18 (82%)	8 (-17%)
Remaining in Delta	himed	13%	4 (-64%)	13 (6%)	13 (7%)	17 (38%)	17 (36%)	30 (138%)	13 (0%)
Remaining in Delta	hihi	5%	4 (-19%)	5 (-9%)	5 (-8%)	5 (-7%)	5 (-5%)	8 (56%)	4 (-10%)
Crossed SJR to South Delta	lolo	54%	54 (0%)	55 (3%)	56 (5%)	58 (7%)	58 (9%)	48 (-11%)	55 (2%)
Crossed SJR to South Delta	lomed	55%	55 (1%)	55 (0%)	55 (1%)	54 (-2%)	54 (-1%)	42 (-24%)	55 (1%)
Crossed SJR to South Delta	lohi	46%	51 (11%)	53 (15%)	52 (14%)	49 (8%)	49 (7%)	39 (-15%)	53 (15%)
Crossed SJR to South Delta	medlo	67%	65 (-3%)	65 (-3%)	65 (-3%)	66 (-1%)	65 (-2%)	41 (-39%)	65 (-3%)
Crossed SJR to South Delta	medmed	57%	63 (10%)	59 (4%)	59 (3%)	53 (-8%)	53 (-8%)	30 (-48%)	60 (4%)
Crossed SJR to South Delta	medhi	33%	51 (56%)	46 (39%)	45 (37%)	38 (16%)	39 (20%)	7 (-80%)	46 (39%)
Crossed SJR to South Delta	hilo	58%	58 (-1%)	59 (1%)	59 (1%)	#N/A	#N/A	54 (-8%)	59 (2%)
Crossed SJR to South Delta	himed	55%	60 (10%)	57 (4%)	57 (4%)	48 (-12%)	48 (-12%)	33 (-40%)	57 (4%)
Crossed SJR to South Delta	hihi	21%	29 (42%)	27 (30%)	27 (31%)	21 (0%)	21 (2%)	-1 (-106%)	28 (33%)

Table I.8-39. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	7%	7 (12%)	6 (-9%)	7 (1%)	7 (7%)	7 (8%)	13 (93%)	6 (-8%)
West of Chipps	lomed	9%	8 (-8%)	8 (-12%)	8 (-7%)	10 (15%)	10 (16%)	16 (87%)	7 (-13%)
West of Chipps	lohi	14%	11 (-19%)	10 (-24%)	11 (-22%)	13 (-4%)	13 (-1%)	19 (42%)	10 (-24%)
West of Chipps	medlo	5%	4 (-12%)	5 (13%)	6 (15%)	6 (15%)	6 (27%)	18 (261%)	5 (11%)
West of Chipps	medmed	10%	6 (-42%)	9 (-13%)	9 (-10%)	13 (33%)	14 (36%)	27 (169%)	9 (-15%)
West of Chipps	medhi	25%	12 (-52%)	15 (-39%)	15 (-38%)	22 (-12%)	21 (-17%)	49 (98%)	15 (-39%)
West of Chipps	hilo	9%	6 (-36%)	10 (5%)	10 (4%)	#N/A	#N/A	9 (-3%)	9 (-4%)
West of Chipps	himed	13%	4 (-67%)	12 (-9%)	12 (-9%)	16 (25%)	16 (25%)	28 (119%)	11 (-12%)
West of Chipps	hihi	35%	33 (-6%)	31 (-12%)	30 (-13%)	35 (0%)	35 (0%)	68 (94%)	30 (-14%)
Entrained at Exports	lolo	75%	76 (0%)	77 (2%)	78 (3%)	78 (4%)	78 (4%)	55 (-27%)	77 (2%)
Entrained at Exports	lomed	79%	81 (3%)	79 (1%)	80 (2%)	78 (-1%)	78 (-1%)	46 (-41%)	80 (2%)
Entrained at Exports	lohi	77%	81 (6%)	82 (7%)	81 (6%)	78 (2%)	78 (1%)	57 (-26%)	82 (7%)
Entrained at Exports	medlo	88%	89 (1%)	87 (-1%)	87 (-1%)	87 (-2%)	86 (-2%)	54 (-38%)	87 (-1%)
Entrained at Exports	medmed	83%	89 (8%)	84 (2%)	84 (1%)	77 (-7%)	77 (-7%)	32 (-61%)	85 (2%)
Entrained at Exports	medhi	63%	82 (29%)	79 (24%)	79 (24%)	70 (10%)	71 (13%)	19 (-69%)	79 (24%)
Entrained at Exports	hilo	90%	90 (1%)	89 (-1%)	89 (-1%)	#N/A	#N/A	88 (-1%)	90 (1%)
Entrained at Exports	himed	83%	94 (13%)	85 (2%)	85 (2%)	79 (-5%)	79 (-5%)	49 (-42%)	85 (2%)
Entrained at Exports	hihi	59%	62 (6%)	65 (10%)	65 (10%)	60 (1%)	60 (1%)	19 (-67%)	66 (11%)
Remaining in Delta	lolo	18%	17 (-6%)	17 (-7%)	15 (-14%)	15 (-17%)	15 (-18%)	32 (80%)	17 (-4%)
Remaining in Delta	lomed	13%	11 (-11%)	13 (3%)	12 (-5%)	12 (-3%)	12 (-5%)	38 (197%)	13 (-1%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	10%	8 (-18%)	8 (-22%)	8 (-16%)	9 (-9%)	9 (-9%)	24 (146%)	8 (-22%)
Remaining in Delta	medlo	7%	6 (-10%)	8 (8%)	7 (6%)	8 (9%)	8 (10%)	28 (303%)	8 (8%)
Remaining in Delta	medmed	7%	5 (-29%)	7 (-5%)	7 (-1%)	9 (29%)	9 (30%)	40 (468%)	7 (-7%)
Remaining in Delta	medhi	12%	6 (-49%)	6 (-48%)	6 (-49%)	8 (-30%)	8 (-32%)	32 (164%)	6 (-47%)
Remaining in Delta	hilo	1%	4 (225%)	1 (-1%)	1 (8%)	#N/A	#N/A	3 (117%)	1 (-17%)
Remaining in Delta	himed	4%	2 (-53%)	3 (-9%)	3 (-10%)	5 (27%)	5 (26%)	23 (521%)	3 (-9%)
Remaining in Delta	hihi	6%	4 (-23%)	4 (-28%)	4 (-27%)	5 (-12%)	5 (-12%)	13 (119%)	4 (-25%)
Crossed SJR to South Delta	lolo	-13%	-13 (3%)	-12 (-6%)	-12 (-7%)	-12 (-9%)	-12 (-10%)	-22 (68%)	-12 (-4%)
Crossed SJR to South Delta	lomed	-13%	-12 (-8%)	-12 (-4%)	-12 (-4%)	-14 (9%)	-14 (8%)	-26 (101%)	-12 (-6%)
Crossed SJR to South Delta	lohi	-16%	-13 (-18%)	-12 (-22%)	-13 (-19%)	-16 (-3%)	-16 (0%)	-26 (64%)	-13 (-21%)
Crossed SJR to South Delta	medlo	-7%	-6 (-10%)	-8 (16%)	-8 (17%)	-8 (13%)	-8 (23%)	-23 (245%)	-8 (15%)
Crossed SJR to South Delta	medmed	-12%	-7 (-40%)	-11 (-10%)	-11 (-7%)	-16 (33%)	-16 (34%)	-36 (200%)	-10 (-11%)
Crossed SJR to South Delta	medhi	-27%	-13 (-51%)	-17 (-39%)	-17 (-39%)	-24 (-12%)	-23 (-17%)	-59 (116%)	-16 (-40%)
Crossed SJR to South Delta	hilo	-10%	-7 (-30%)	-10 (5%)	-10 (4%)	#N/A	#N/A	-9 (-2%)	-9 (-4%)
Crossed SJR to South Delta	himed	-13%	-5 (-66%)	-12 (-8%)	-12 (-8%)	-17 (25%)	-17 (26%)	-32 (137%)	-12 (-11%)
Crossed SJR to South Delta	hihi	-36%	-34 (-5%)	-31 (-12%)	-31 (-13%)	-36 (0%)	-36 (0%)	-72 (100%)	-31 (-14%)

Table I.8-40. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	0%	0 (286%)	0 (-32%)	0 (633%)	0 (199%)	0 (-321%)	N/A	0 (-550%)
West of Chipps	lomed	0%	N/A	0 (-192%)	N/A	N/A	N/A	N/A	0 (-144%)
West of Chipps	lohi	0%	0 (60%)	0 (-205%)	0 (-205%)	N/A	N/A	N/A	0 (-109%)
West of Chipps	medlo	0%	0 (-175%)	0 (-182%)	0 (-97%)	0 (-186%)	0 (-67%)	N/A	0 (-166%)
West of Chipps	medmed	0%	0 (-72%)	0 (-113%)	0 (1%)	N/A	N/A	N/A	0 (-62%)
West of Chipps	medhi	2%	0 (-87%)	1 (-71%)	1 (-70%)	2 (-1%)	2 (-14%)	20 (757%)	1 (-70%)
West of Chipps	hilo	0%	0 (-165%)	0 (-100%)	0 (-100%)	#N/A	#N/A	0 (-196%)	0 (-100%)
West of Chipps	himed	0%	0 (-163%)	0 (-104%)	0 (-148%)	0 (-120%)	0 (-100%)	N/A	0 (-100%)
West of Chipps	hihi	6%	7 (15%)	5 (-5%)	5 (-5%)	6 (5%)	6 (3%)	41 (605%)	5 (-15%)
Entrained at Exports	lolo	98%	98 (0%)	98 (0%)	98 (0%)	98 (0%)	98 (0%)	94 (-4%)	98 (-1%)
Entrained at Exports	lomed	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	93 (-7%)	100 (0%)
Entrained at Exports	lohi	100%	100 (0%)	100 (0%)	100 (0%)	98 (-1%)	98 (-2%)	90 (-10%)	100 (0%)
Entrained at Exports	medlo	99%	100 (1%)	98 (0%)	99 (0%)	98 (0%)	99 (0%)	95 (-4%)	99 (0%)
Entrained at Exports	medmed	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	89 (-11%)	100 (0%)
Entrained at Exports	medhi	95%	99 (4%)	99 (4%)	99 (4%)	96 (1%)	96 (1%)	60 (-37%)	99 (4%)
Entrained at Exports	hilo	100%	100 (0%)	100 (0%)	100 (0%)	#N/A	#N/A	100 (0%)	100 (0%)
Entrained at Exports	himed	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	93 (-7%)	100 (0%)
Entrained at Exports	hihi	94%	92 (-1%)	94 (1%)	94 (1%)	93 (-1%)	93 (0%)	49 (-48%)	95 (1%)
Remaining in Delta	lolo	2%	2 (23%)	2 (20%)	2 (12%)	2 (16%)	2 (16%)	6 (211%)	2 (27%)
Remaining in Delta	lomed	0%	0 (26%)	0 (-44%)	0 (70%)	0 (36%)	0 (44%)	7 (5091%)	0 (-39%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	0%	0 (-57%)	0 (-62%)	0 (-53%)	1 (303%)	1 (375%)	9 (3244%)	0 (-51%)
Remaining in Delta	medlo	1%	0 (-56%)	2 (34%)	1 (32%)	2 (35%)	1 (28%)	5 (352%)	1 (24%)
Remaining in Delta	medmed	0%	0 (-79%)	0 (-80%)	0 (-67%)	0 (579%)	0 (543%)	10 (21570%)	0 (-81%)
Remaining in Delta	medhi	2%	0 (-88%)	0 (-84%)	0 (-84%)	2 (-23%)	2 (-38%)	20 (695%)	0 (-85%)
Remaining in Delta	hilo	0%	N/A	N/A	N/A	#N/A	#N/A	N/A	N/A
Remaining in Delta	himed	0%	0 (-100%)	0 (-100%)	0 (-70%)	0 (392%)	0 (332%)	5 (60037%)	0 (-100%)
Remaining in Delta	Hihi	1%	1 (55%)	1 (-25%)	1 (-25%)	1 (26%)	1 (33%)	10 (1345%)	1 (-28%)
Crossed SJR to South Delta	Lolo	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	lomed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	lohi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	medlo	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	medmed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	medhi	-3%	0 (-88%)	-1 (-74%)	-1 (-73%)	-3 (0%)	-2 (-15%)	-26 (819%)	-1 (-73%)
Crossed SJR to South Delta	hilo	0%	N/A	N/A	N/A	#N/A	#N/A	N/A	N/A
Crossed SJR to South Delta	himed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	hihi	-6%	-7 (16%)	-6 (-6%)	-6 (-5%)	-6 (6%)	-6 (3%)	-43 (639%)	-5 (-15%)

Table I.8-41. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	30%	32 (7%)	28 (-6%)	31 (4%)	33 (12%)	34 (14%)	44 (49%)	28 (-5%)
West of Chipps	lomed	40%	38 (-6%)	36 (-11%)	37 (-7%)	43 (8%)	44 (9%)	53 (32%)	36 (-12%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lohi	65%	59 (-8%)	57 (-12%)	57 (-12%)	61 (-6%)	62 (-4%)	68 (5%)	57 (-12%)
West of Chipps	medlo	32%	30 (-6%)	34 (8%)	35 (9%)	35 (10%)	37 (15%)	56 (77%)	34 (7%)
West of Chipps	medmed	53%	39 (-26%)	48 (-9%)	49 (-7%)	59 (13%)	60 (14%)	76 (43%)	48 (-9%)
West of Chipps	medhi	81%	65 (-20%)	72 (-12%)	72 (-11%)	77 (-5%)	76 (-7%)	92 (13%)	71 (-12%)
West of Chipps	hilo	62%	41 (-34%)	69 (10%)	68 (9%)	#N/A	#N/A	60 (-4%)	65 (4%)
West of Chipps	himed	73%	40 (-45%)	69 (-5%)	69 (-4%)	78 (7%)	78 (8%)	83 (14%)	69 (-5%)
West of Chipps	hihi	93%	87 (-7%)	91 (-3%)	91 (-3%)	93 (0%)	93 (0%)	96 (3%)	90 (-3%)
Entrained at Exports	lolo	22%	20 (-12%)	24 (7%)	25 (11%)	27 (20%)	28 (24%)	7 (-68%)	24 (7%)
Entrained at Exports	lomed	25%	26 (3%)	25 (-1%)	25 (0%)	23 (-8%)	23 (-7%)	5 (-79%)	25 (1%)
Entrained at Exports	lohi	17%	21 (27%)	22 (30%)	21 (27%)	21 (26%)	21 (26%)	9 (-44%)	22 (30%)
Entrained at Exports	medlo	47%	49 (3%)	41 (-13%)	41 (-13%)	43 (-9%)	40 (-14%)	17 (-65%)	41 (-12%)
Entrained at Exports	medmed	27%	43 (58%)	29 (5%)	28 (3%)	22 (-22%)	21 (-24%)	4 (-84%)	30 (8%)
Entrained at Exports	medhi	10%	22 (119%)	16 (60%)	16 (56%)	14 (35%)	14 (41%)	1 (-85%)	17 (63%)
Entrained at Exports	hilo	31%	47 (52%)	27 (-13%)	27 (-12%)	#N/A	#N/A	31 (-1%)	30 (-2%)
Entrained at Exports	himed	21%	54 (165%)	22 (8%)	22 (9%)	15 (-25%)	15 (-26%)	10 (-54%)	23 (12%)
Entrained at Exports	hihi	5%	11 (114%)	7 (43%)	7 (43%)	5 (3%)	5 (7%)	2 (-54%)	7 (49%)
Remaining in Delta	lolo	48%	48 (1%)	48 (0%)	44 (-8%)	40 (-17%)	38 (-20%)	49 (1%)	48 (0%)
Remaining in Delta	lomed	35%	36 (4%)	40 (14%)	38 (8%)	34 (-3%)	33 (-6%)	42 (19%)	39 (12%)
Remaining in Delta	lohi	18%	19 (4%)	21 (14%)	21 (16%)	18 (-3%)	17 (-9%)	23 (23%)	21 (14%)
Remaining in Delta	medlo	21%	22 (2%)	25 (17%)	24 (15%)	22 (4%)	23 (10%)	27 (29%)	25 (17%)
Remaining in Delta	medmed	20%	18 (-12%)	23 (15%)	23 (14%)	19 (-4%)	19 (-4%)	20 (1%)	23 (14%)
Remaining in Delta	medhi	9%	13 (45%)	12 (40%)	12 (34%)	9 (5%)	10 (15%)	7 (-23%)	12 (40%)
Remaining in Delta	hilo	7%	12 (81%)	5 (-31%)	5 (-32%)	#N/A	#N/A	9 (41%)	5 (-31%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	himed	7%	6 (-13%)	9 (24%)	8 (21%)	7 (0%)	7 (-4%)	8 (14%)	8 (20%)
Remaining in Delta	hihi	2%	2 (26%)	2 (18%)	2 (17%)	2 (-5%)	2 (3%)	1 (-31%)	2 (18%)
Crossed SJR to South Delta	lolo	43%	41 (-6%)	44 (2%)	44 (1%)	45 (4%)	45 (5%)	26 (-40%)	44 (1%)
Crossed SJR to South Delta	lomed	40%	41 (2%)	41 (2%)	41 (1%)	38 (-6%)	38 (-6%)	20 (-50%)	42 (3%)
Crossed SJR to South Delta	lohi	24%	29 (19%)	30 (23%)	29 (22%)	28 (18%)	28 (15%)	17 (-28%)	30 (23%)
Crossed SJR to South Delta	medlo	57%	58 (3%)	51 (-9%)	51 (-10%)	53 (-6%)	51 (-10%)	29 (-49%)	52 (-9%)
Crossed SJR to South Delta	medmed	37%	52 (39%)	39 (6%)	39 (4%)	31 (-17%)	30 (-19%)	13 (-66%)	40 (7%)
Crossed SJR to South Delta	medhi	14%	28 (98%)	21 (53%)	21 (49%)	18 (28%)	19 (35%)	4 (-74%)	22 (56%)
Crossed SJR to South Delta	hilo	35%	53 (54%)	29 (-16%)	30 (-14%)	#N/A	#N/A	36 (4%)	32 (-6%)
Crossed SJR to South Delta	himed	24%	57 (135%)	27 (9%)	27 (9%)	19 (-21%)	19 (-22%)	14 (-44%)	27 (12%)
Crossed SJR to South Delta	hihi	6%	12 (96%)	8 (37%)	8 (37%)	6 (1%)	6 (6%)	3 (-54%)	9 (42%)

Table I.8-42. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	51%	56 (9%)	51 (0%)	56 (10%)	57 (10%)	58 (12%)	65 (25%)	52 (1%)
West of Chipps	lomed	68%	71 (4%)	67 (-2%)	69 (1%)	71 (4%)	72 (5%)	73 (6%)	67 (-2%)
West of Chipps	lohi	82%	82 (-1%)	80 (-3%)	80 (-3%)	81 (-2%)	80 (-2%)	80 (-3%)	80 (-3%)
West of Chipps	medlo	62%	64 (4%)	65 (6%)	66 (7%)	64 (4%)	67 (9%)	88 (43%)	65 (5%)
West of Chipps	medmed	84%	79 (-6%)	83 (-1%)	84 (-1%)	86 (2%)	87 (3%)	93 (10%)	83 (-1%)
West of Chipps	medhi	94%	90 (-4%)	92 (-2%)	92 (-2%)	93 (-1%)	92 (-2%)	96 (2%)	91 (-2%)
West of Chipps	hilo	95%	90 (-5%)	96 (2%)	96 (1%)	#N/A	#N/A	95 (0%)	96 (1%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	himed	96%	88 (-8%)	96 (-1%)	96 (-1%)	97 (1%)	97 (1%)	97 (1%)	96 (-1%)
West of Chipps	hihi	99%	98 (-1%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)
Entrained at Exports	lolo	7%	5 (-23%)	7 (-1%)	7 (3%)	9 (30%)	9 (38%)	2 (-74%)	7 (-1%)
Entrained at Exports	lomed	7%	5 (-21%)	6 (-16%)	6 (-16%)	6 (-10%)	6 (-7%)	1 (-84%)	6 (-15%)
Entrained at Exports	lohi	4%	5 (11%)	5 (14%)	5 (11%)	5 (26%)	5 (31%)	2 (-47%)	5 (14%)
Entrained at Exports	medlo	16%	14 (-7%)	11 (-29%)	11 (-29%)	14 (-13%)	12 (-24%)	3 (-83%)	11 (-28%)
Entrained at Exports	medmed	5%	9 (71%)	5 (-11%)	5 (-12%)	4 (-21%)	4 (-26%)	1 (-89%)	5 (-9%)
Entrained at Exports	medhi	2%	3 (116%)	2 (37%)	2 (34%)	2 (33%)	2 (47%)	0 (-87%)	2 (43%)
Entrained at Exports	hilo	3%	6 (105%)	2 (-27%)	2 (-24%)	#N/A	#N/A	3 (-13%)	3 (-11%)
Entrained at Exports	himed	2%	8 (343%)	2 (3%)	2 (4%)	1 (-24%)	1 (-23%)	1 (-50%)	2 (6%)
Entrained at Exports	hihi	0%	1 (134%)	0 (37%)	0 (34%)	0 (5%)	0 (11%)	0 (-58%)	0 (43%)
Remaining in Delta	lolo	42%	39 (-7%)	42 (0%)	37 (-12%)	35 (-17%)	33 (-21%)	34 (-20%)	42 (-1%)
Remaining in Delta	lomed	25%	23 (-6%)	28 (11%)	25 (1%)	22 (-9%)	22 (-12%)	26 (6%)	27 (10%)
Remaining in Delta	lohi	14%	14 (0%)	16 (13%)	16 (12%)	14 (3%)	15 (5%)	18 (29%)	15 (11%)
Remaining in Delta	medlo	23%	22 (-5%)	24 (3%)	23 (1%)	22 (-3%)	21 (-7%)	9 (-59%)	24 (5%)
Remaining in Delta	medmed	10%	12 (12%)	12 (13%)	12 (11%)	9 (-9%)	9 (-12%)	7 (-35%)	12 (12%)
Remaining in Delta	medhi	5%	7 (48%)	6 (33%)	6 (27%)	5 (9%)	6 (19%)	4 (-13%)	6 (34%)
Remaining in Delta	hilo	2%	4 (87%)	1 (-38%)	2 (-29%)	#N/A	#N/A	3 (18%)	2 (-29%)
Remaining in Delta	himed	2%	3 (76%)	2 (28%)	2 (27%)	2 (-5%)	2 (-11%)	2 (18%)	2 (23%)
Remaining in Delta	hihi	1%	1 (38%)	1 (25%)	1 (27%)	1 (1%)	1 (5%)	1 (9%)	1 (26%)
Crossed SJR to South Delta	lolo	17%	15 (-17%)	16 (-8%)	15 (-11%)	18 (2%)	18 (4%)	9 (-50%)	16 (-8%)
Crossed SJR to South Delta	lomed	13%	11 (-17%)	12 (-10%)	12 (-12%)	12 (-9%)	12 (-9%)	6 (-53%)	12 (-9%)
Crossed SJR to South Delta	lohi	7%	7 (3%)	8 (10%)	7 (8%)	8 (19%)	8 (21%)	5 (-25%)	7 (9%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Crossed SJR to South Delta	medlo	22%	20 (-7%)	17 (-24%)	16 (-25%)	20 (-10%)	18 (-19%)	5 (-77%)	17 (-24%)
Crossed SJR to South Delta	medmed	8%	12 (50%)	8 (-7%)	8 (-8%)	7 (-18%)	7 (-21%)	2 (-77%)	8 (-6%)
Crossed SJR to South Delta	medhi	2%	5 (98%)	3 (36%)	3 (31%)	3 (28%)	3 (42%)	1 (-76%)	3 (41%)
Crossed SJR to South Delta	hilo	4%	8 (103%)	3 (-29%)	3 (-25%)	#N/A	#N/A	4 (-6%)	3 (-14%)
Crossed SJR to South Delta	himed	2%	9 (283%)	2 (4%)	3 (5%)	2 (-20%)	2 (-21%)	1 (-41%)	3 (5%)
Crossed SJR to South Delta	hihi	0%	1 (111%)	1 (31%)	1 (28%)	0 (1%)	0 (9%)	0 (-57%)	1 (35%)

Table I.8-43. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	10%	11 (8%)	9 (-10%)	11 (2%)	13 (22%)	13 (25%)	19 (84%)	9 (-9%)
West of Chipps	lomed	17%	14 (-18%)	13 (-23%)	14 (-17%)	19 (11%)	20 (14%)	26 (53%)	13 (-23%)
West of Chipps	lohi	44%	37 (-14%)	35 (-19%)	35 (-20%)	40 (-7%)	43 (-1%)	46 (5%)	35 (-19%)
West of Chipps	medlo	13%	10 (-19%)	14 (9%)	14 (10%)	15 (16%)	16 (23%)	29 (125%)	14 (8%)
West of Chipps	medmed	28%	16 (-42%)	23 (-18%)	24 (-16%)	36 (28%)	37 (30%)	51 (78%)	23 (-19%)
West of Chipps	medhi	67%	46 (-32%)	54 (-20%)	55 (-18%)	63 (-6%)	61 (-10%)	79 (18%)	53 (-21%)
West of Chipps	hilo	41%	17 (-59%)	49 (17%)	49 (17%)	#N/A	#N/A	37 (-10%)	44 (6%)
West of Chipps	himed	54%	19 (-65%)	48 (-10%)	49 (-9%)	61 (15%)	62 (16%)	68 (27%)	48 (-11%)
West of Chipps	hihi	88%	79 (-11%)	84 (-5%)	84 (-5%)	88 (0%)	88 (-1%)	93 (5%)	84 (-5%)
Entrained at Exports	lolo	24%	21 (-11%)	27 (14%)	29 (19%)	32 (32%)	34 (40%)	9 (-63%)	27 (13%)
Entrained at Exports	lomed	30%	28 (-5%)	28 (-4%)	28 (-4%)	27 (-9%)	27 (-7%)	6 (-79%)	29 (-2%)
Entrained at Exports	lohi	23%	29 (24%)	30 (26%)	29 (24%)	29 (23%)	29 (25%)	13 (-44%)	29 (26%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Entrained at Exports	medlo	62%	63 (1%)	55 (-12%)	55 (-12%)	57 (-8%)	53 (-15%)	18 (-70%)	55 (-11%)
Entrained at Exports	medmed	36%	56 (57%)	37 (4%)	37 (3%)	28 (-22%)	27 (-24%)	5 (-85%)	38 (6%)
Entrained at Exports	medhi	15%	31 (112%)	23 (53%)	22 (52%)	19 (31%)	20 (36%)	2 (-84%)	23 (58%)
Entrained at Exports	hilo	43%	64 (48%)	40 (-7%)	41 (-6%)	#N/A	#N/A	42 (-3%)	45 (5%)
Entrained at Exports	himed	31%	71 (131%)	33 (6%)	33 (6%)	22 (-28%)	22 (-29%)	13 (-59%)	34 (10%)
Entrained at Exports	hihi	8%	16 (113%)	11 (43%)	11 (43%)	8 (4%)	8 (8%)	4 (-53%)	11 (48%)
Remaining in Delta	lolo	66%	67 (3%)	63 (-3%)	61 (-7%)	56 (-15%)	53 (-19%)	72 (10%)	63 (-3%)
Remaining in Delta	lomed	53%	58 (8%)	59 (10%)	58 (8%)	54 (2%)	53 (0%)	68 (27%)	58 (9%)
Remaining in Delta	lohi	33%	34 (2%)	35 (7%)	36 (9%)	31 (-7%)	28 (-16%)	41 (25%)	35 (6%)
Remaining in Delta	medlo	25%	27 (7%)	31 (24%)	31 (24%)	28 (11%)	32 (24%)	53 (108%)	31 (22%)
Remaining in Delta	medmed	36%	27 (-24%)	39 (10%)	39 (10%)	36 (0%)	36 (0%)	44 (22%)	39 (9%)
Remaining in Delta	medhi	18%	23 (25%)	24 (30%)	23 (26%)	18 (-1%)	19 (6%)	18 (2%)	24 (30%)
Remaining in Delta	hilo	15%	19 (22%)	11 (-28%)	11 (-30%)	#N/A	#N/A	20 (34%)	11 (-31%)
Remaining in Delta	himed	16%	10 (-34%)	19 (20%)	19 (19%)	16 (5%)	16 (0%)	19 (22%)	18 (17%)
Remaining in Delta	hihi	4%	5 (23%)	5 (19%)	5 (20%)	4 (-4%)	4 (1%)	4 (-10%)	5 (20%)
Crossed SJR to South Delta	lolo	52%	49 (-6%)	53 (3%)	54 (4%)	55 (7%)	56 (9%)	36 (-30%)	53 (3%)
Crossed SJR to South Delta	lomed	53%	53 (0%)	54 (1%)	54 (1%)	51 (-5%)	51 (-4%)	31 (-42%)	54 (2%)
Crossed SJR to South Delta	lohi	36%	41 (15%)	43 (19%)	42 (18%)	41 (13%)	40 (11%)	27 (-24%)	42 (18%)
Crossed SJR to South Delta	medlo	74%	75 (2%)	69 (-6%)	69 (-6%)	70 (-4%)	68 (-8%)	41 (-45%)	69 (-6%)
Crossed SJR to South Delta	medmed	53%	69 (31%)	56 (5%)	55 (4%)	44 (-16%)	44 (-17%)	21 (-60%)	56 (6%)
Crossed SJR to South Delta	medhi	22%	40 (84%)	32 (46%)	31 (43%)	27 (22%)	28 (28%)	7 (-67%)	33 (48%)
Crossed SJR to South Delta	hilo	52%	73 (41%)	46 (-11%)	46 (-11%)	#N/A	#N/A	54 (3%)	51 (-2%)
Crossed SJR to South Delta	himed	39%	76 (93%)	42 (7%)	42 (7%)	31 (-21%)	31 (-22%)	22 (-45%)	43 (10%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Crossed SJR to South Delta	hihi	10%	18 (91%)	13 (36%)	13 (36%)	10 (1%)	10 (6%)	5 (-52%)	13 (40%)

Table I.8-44. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	24%	25 (4%)	23 (-6%)	25 (5%)	27 (13%)	27 (14%)	29 (23%)	23 (-4%)
West of Chipps	lomed	35%	35 (-1%)	32 (-9%)	33 (-4%)	37 (5%)	37 (7%)	33 (-4%)	32 (-8%)
West of Chipps	lohi	41%	39 (-4%)	37 (-8%)	37 (-8%)	40 (-2%)	39 (-4%)	37 (-10%)	37 (-8%)
West of Chipps	medlo	31%	31 (0%)	32 (4%)	33 (5%)	33 (6%)	35 (12%)	51 (64%)	32 (2%)
West of Chipps	medmed	50%	44 (-11%)	46 (-7%)	46 (-6%)	51 (3%)	51 (4%)	53 (6%)	46 (-7%)
West of Chipps	medhi	53%	48 (-9%)	49 (-8%)	50 (-7%)	53 (-1%)	52 (-2%)	53 (-1%)	49 (-8%)
West of Chipps	hilo	70%	57 (-18%)	66 (-6%)	66 (-6%)	#N/A	#N/A	65 (-7%)	66 (-5%)
West of Chipps	himed	68%	60 (-11%)	63 (-7%)	63 (-7%)	68 (1%)	68 (1%)	63 (-7%)	63 (-7%)
West of Chipps	hihi	68%	62 (-9%)	62 (-9%)	62 (-9%)	68 (0%)	68 (0%)	61 (-10%)	62 (-9%)
Entrained at Exports	lolo	2%	2 (-35%)	2 (-14%)	2 (-9%)	3 (32%)	4 (42%)	0 (-81%)	2 (-13%)
Entrained at Exports	lomed	3%	2 (-33%)	2 (-27%)	2 (-27%)	2 (-11%)	3 (-9%)	0 (-90%)	2 (-26%)
Entrained at Exports	lohi	2%	2 (-9%)	2 (-9%)	2 (-10%)	2 (19%)	2 (25%)	1 (-64%)	2 (-8%)
Entrained at Exports	medlo	6%	5 (-21%)	4 (-39%)	4 (-39%)	5 (-13%)	4 (-28%)	1 (-86%)	4 (-39%)
Entrained at Exports	medmed	2%	3 (55%)	1 (-25%)	1 (-27%)	2 (-22%)	1 (-26%)	0 (-93%)	1 (-25%)
Entrained at Exports	medhi	1%	1 (77%)	1 (9%)	1 (6%)	1 (31%)	1 (47%)	0 (-96%)	1 (16%)
Entrained at Exports	hilo	1%	1 (105%)	0 (-62%)	0 (-55%)	#N/A	#N/A	0 (-21%)	0 (-53%)
Entrained at Exports	himed	0%	2 (435%)	0 (-24%)	0 (-25%)	0 (-25%)	0 (-33%)	0 (-57%)	0 (-30%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Entrained at Exports	hihi	0%	0 (102%)	0 (0%)	0 (1%)	0 (17%)	0 (33%)	0 (-74%)	0 (9%)
Remaining in Delta	lolo	74%	73 (0%)	75 (2%)	73 (-1%)	70 (-5%)	69 (-6%)	70 (-5%)	75 (2%)
Remaining in Delta	lomed	62%	63 (2%)	66 (6%)	65 (4%)	61 (-2%)	60 (-3%)	66 (7%)	66 (6%)
Remaining in Delta	lohi	58%	59 (3%)	61 (6%)	61 (6%)	58 (1%)	59 (2%)	63 (9%)	61 (6%)
Remaining in Delta	medlo	63%	64 (2%)	64 (2%)	64 (1%)	62 (-2%)	61 (-3%)	48 (-23%)	64 (3%)
Remaining in Delta	medmed	48%	53 (9%)	52 (8%)	52 (8%)	47 (-2%)	47 (-3%)	47 (-3%)	52 (8%)
Remaining in Delta	medhi	46%	51 (10%)	50 (9%)	50 (8%)	46 (1%)	47 (2%)	47 (3%)	50 (9%)
Remaining in Delta	hilo	30%	42 (41%)	34 (15%)	34 (14%)	#N/A	#N/A	35 (17%)	34 (14%)
Remaining in Delta	himed	32%	38 (19%)	37 (15%)	37 (15%)	32 (-1%)	31 (-2%)	37 (16%)	37 (15%)
Remaining in Delta	hihi	32%	38 (20%)	38 (19%)	38 (19%)	32 (0%)	32 (1%)	39 (21%)	38 (19%)
Crossed SJR to South Delta	lolo	9%	7 (-23%)	8 (-16%)	7 (-20%)	9 (1%)	9 (2%)	4 (-53%)	8 (-16%)
Crossed SJR to South Delta	lomed	7%	6 (-24%)	6 (-16%)	6 (-20%)	7 (-8%)	7 (-9%)	3 (-57%)	6 (-16%)
Crossed SJR to South Delta	lohi	4%	4 (-10%)	4 (-7%)	4 (-7%)	5 (12%)	5 (15%)	3 (-35%)	4 (-7%)
Crossed SJR to South Delta	medlo	11%	9 (-16%)	7 (-30%)	7 (-30%)	10 (-9%)	8 (-19%)	3 (-76%)	7 (-30%)
Crossed SJR to South Delta	medmed	4%	6 (28%)	4 (-17%)	4 (-18%)	4 (-16%)	3 (-19%)	1 (-76%)	4 (-16%)
Crossed SJR to South Delta	medhi	1%	2 (47%)	2 (9%)	1 (4%)	2 (22%)	2 (32%)	0 (-73%)	2 (12%)
Crossed SJR to South Delta	hilo	1%	2 (66%)	1 (-58%)	1 (-52%)	#N/A	#N/A	1 (-32%)	1 (-49%)
Crossed SJR to South Delta	himed	1%	3 (237%)	1 (-18%)	1 (-22%)	1 (-17%)	1 (-22%)	0 (-48%)	1 (-23%)
Crossed SJR to South Delta	hihi	0%	0 (31%)	0 (-5%)	0 (-9%)	0 (17%)	0 (22%)	0 (-54%)	0 (-9%)

Table I.8-45. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	86%	89 (3%)	86 (0%)	89 (3%)	89 (3%)	90 (4%)	92 (7%)	86 (0%)
West of Chipps	lomed	93%	94 (1%)	93 (-1%)	93 (0%)	94 (1%)	94 (1%)	95 (2%)	93 (-1%)
West of Chipps	lohi	98%	97 (0%)	97 (-1%)	97 (-1%)	97 (-1%)	97 (0%)	98 (0%)	97 (-1%)
West of Chipps	medlo	91%	92 (1%)	92 (1%)	92 (1%)	92 (1%)	93 (2%)	98 (8%)	92 (1%)
West of Chipps	medmed	97%	96 (-1%)	97 (0%)	97 (0%)	98 (0%)	98 (0%)	99 (2%)	97 (0%)
West of Chipps	medhi	99%	99 (-1%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)
West of Chipps	hilo	99%	99 (-1%)	100 (0%)	100 (0%)	#N/A	#N/A	100 (0%)	100 (0%)
West of Chipps	himed	100%	98 (-2%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
West of Chipps	hihi	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Entrained at Exports	lolo	1%	1 (-44%)	1 (-26%)	1 (-24%)	1 (19%)	1 (27%)	0 (-89%)	1 (-27%)
Entrained at Exports	lomed	1%	1 (-32%)	1 (-34%)	1 (-35%)	1 (-14%)	1 (-10%)	0 (-93%)	1 (-34%)
Entrained at Exports	lohi	0%	0 (16%)	0 (13%)	0 (6%)	0 (69%)	0 (59%)	0 (-81%)	0 (10%)
Entrained at Exports	medlo	2%	2 (-20%)	1 (-54%)	1 (-54%)	2 (-25%)	1 (-37%)	0 (-88%)	1 (-54%)
Entrained at Exports	medmed	0%	1 (87%)	0 (-37%)	0 (-39%)	0 (-25%)	0 (-32%)	0 (-91%)	0 (-38%)
Entrained at Exports	medhi	0%	0 (268%)	0 (53%)	0 (41%)	0 (116%)	0 (179%)	0 (-98%)	0 (86%)
Entrained at Exports	hilo	0%	0 (214%)	0 (-58%)	0 (-40%)	#N/A	#N/A	0 (-73%)	0 (-49%)
Entrained at Exports	himed	0%	1 (3400%)	0 (2%)	0 (-12%)	0 (10%)	0 (6%)	0 (-16%)	0 (-16%)
Entrained at Exports	hihi	0%	0 (325%)	0 (-62%)	0 (-54%)	0 (-38%)	0 (35%)	0 (-86%)	0 (-23%)
Remaining in Delta	lolo	13%	10 (-17%)	13 (5%)	10 (-17%)	10 (-24%)	9 (-28%)	7 (-41%)	13 (2%)
Remaining in Delta	lomed	6%	5 (-9%)	7 (18%)	6 (2%)	5 (-15%)	5 (-18%)	5 (-20%)	7 (16%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	2%	2 (14%)	3 (30%)	3 (32%)	2 (15%)	2 (15%)	2 (13%)	3 (30%)
Remaining in Delta	medlo	7%	7 (-3%)	7 (2%)	7 (-1%)	6 (-11%)	5 (-19%)	2 (-76%)	7 (4%)
Remaining in Delta	medmed	2%	3 (41%)	2 (19%)	2 (16%)	2 (-12%)	2 (-16%)	1 (-51%)	2 (17%)
Remaining in Delta	medhi	1%	1 (74%)	1 (52%)	1 (43%)	1 (15%)	1 (30%)	1 (-5%)	1 (52%)
Remaining in Delta	hilo	0%	1 (73%)	0 (-48%)	0 (-65%)	#N/A	#N/A	0 (-11%)	0 (-51%)
Remaining in Delta	himed	0%	1 (342%)	0 (38%)	0 (45%)	0 (-1%)	0 (-15%)	0 (24%)	0 (28%)
Remaining in Delta	hihi	0%	0 (55%)	0 (29%)	0 (31%)	0 (8%)	0 (9%)	0 (2%)	0 (34%)
Crossed SJR to South Delta	lolo	3%	2 (-34%)	2 (-24%)	2 (-30%)	3 (-8%)	3 (-6%)	1 (-74%)	2 (-25%)
Crossed SJR to South Delta	lomed	2%	1 (-25%)	1 (-21%)	1 (-25%)	2 (-13%)	2 (-12%)	0 (-76%)	1 (-21%)
Crossed SJR to South Delta	lohi	0%	1 (16%)	1 (17%)	1 (12%)	1 (58%)	1 (48%)	0 (-58%)	1 (15%)
Crossed SJR to South Delta	medlo	3%	3 (-14%)	2 (-45%)	2 (-45%)	3 (-22%)	2 (-32%)	1 (-85%)	2 (-45%)
Crossed SJR to South Delta	medmed	1%	1 (75%)	1 (-27%)	1 (-29%)	1 (-23%)	1 (-28%)	0 (-88%)	1 (-26%)
Crossed SJR to South Delta	medhi	0%	0 (270%)	0 (86%)	0 (64%)	0 (108%)	0 (180%)	0 (-96%)	0 (113%)
Crossed SJR to South Delta	hilo	0%	1 (213%)	0 (-65%)	0 (-46%)	#N/A	#N/A	0 (-72%)	0 (-54%)
Crossed SJR to South Delta	himed	0%	1 (3277%)	0 (7%)	0 (4%)	0 (5%)	0 (8%)	0 (-9%)	0 (-13%)
Crossed SJR to South Delta	hihi	0%	0 (320%)	0 (-63%)	0 (-44%)	0 (-25%)	0 (52%)	0 (-89%)	0 (-31%)

Table I.8-46. Mean March through June neutrally buoyant particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	67%	54 (-20%)	64 (-4%)	61 (-9%)	65 (-3%)	65 (-3%)	62 (-7%)	62 (-8%)
West of Chipps	lomed	64%	57 (-11%)	63 (-3%)	62 (-4%)	64 (-1%)	63 (-2%)	62 (-4%)	62 (-3%)
West of Chipps	lohi	63%	60 (-5%)	61 (-3%)	61 (-4%)	62 (-1%)	63 (0%)	61 (-3%)	61 (-4%)
West of Chipps	medlo	73%	57 (-22%)	73 (-1%)	74 (1%)	76 (4%)	72 (-2%)	70 (-5%)	73 (0%)
West of Chipps	medmed	73%	67 (-8%)	71 (-3%)	71 (-3%)	74 (1%)	74 (1%)	76 (4%)	71 (-3%)
West of Chipps	medhi	77%	72 (-7%)	75 (-4%)	75 (-3%)	77 (-1%)	75 (-3%)	80 (4%)	75 (-4%)
West of Chipps	hilo	93%	87 (-6%)	95 (2%)	95 (3%)	#N/A	#N/A	92 (0%)	95 (3%)
West of Chipps	himed	94%	91 (-3%)	93 (-1%)	93 (-1%)	94 (0%)	95 (1%)	94 (0%)	94 (0%)
West of Chipps	hihi	97%	96 (-1%)	97 (0%)	97 (0%)	97 (0%)	97 (0%)	97 (0%)	97 (0%)
Entrained at Exports	lolo	0%	0 (-66%)	0 (-39%)	0 (-45%)	0 (27%)	0 (39%)	0 (-91%)	0 (-58%)
Entrained at Exports	lomed	0%	0 (-84%)	0 (-69%)	0 (-59%)	0 (-29%)	0 (-24%)	0 (-98%)	0 (-66%)
Entrained at Exports	lohi	0%	0 (-38%)	0 (-25%)	0 (-69%)	0 (66%)	0 (118%)	0 (-53%)	0 (-89%)
Entrained at Exports	medlo	0%	0 (-63%)	0 (-49%)	0 (-57%)	0 (10%)	0 (-37%)	0 (-100%)	0 (-59%)
Entrained at Exports	medmed	0%	0 (-19%)	0 (-97%)	0 (-64%)	0 (-45%)	0 (-57%)	0 (-100%)	0 (-67%)
Entrained at Exports	medhi	0%	0 (88%)	0 (-100%)	0 (104%)	0 (309%)	0 (452%)	0 (-100%)	0 (194%)
Entrained at Exports	hilo	0%	N/A	N/A	N/A	#N/A	#N/A	N/A	N/A
Entrained at Exports	himed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Entrained at Exports	hihi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Remaining in Delta	lolo	33%	46 (41%)	36 (8%)	39 (18%)	35 (6%)	35 (6%)	38 (15%)	38 (17%)
Remaining in Delta	lomed	36%	43 (20%)	37 (5%)	38 (7%)	36 (2%)	37 (3%)	38 (7%)	38 (5%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	37%	40 (9%)	39 (6%)	39 (6%)	38 (2%)	37 (0%)	39 (5%)	39 (6%)
Remaining in Delta	medlo	27%	43 (59%)	27 (2%)	26 (-2%)	24 (-10%)	28 (5%)	30 (13%)	27 (0%)
Remaining in Delta	medmed	27%	33 (23%)	29 (8%)	29 (7%)	26 (-3%)	26 (-3%)	24 (-10%)	29 (8%)
Remaining in Delta	medhi	23%	28 (23%)	25 (13%)	25 (11%)	23 (4%)	25 (10%)	20 (-13%)	25 (13%)
Remaining in Delta	hilo	7%	13 (71%)	5 (-31%)	5 (-37%)	#N/A	#N/A	8 (3%)	5 (-34%)
Remaining in Delta	himed	6%	9 (47%)	7 (12%)	7 (18%)	6 (-5%)	5 (-11%)	6 (0%)	6 (3%)
Remaining in Delta	hihi	3%	4 (24%)	3 (16%)	3 (16%)	3 (4%)	3 (8%)	3 (2%)	3 (16%)
Crossed SJR to South Delta	lolo	0%	0 (-61%)	0 (-44%)	0 (-59%)	0 (-23%)	0 (-31%)	0 (-83%)	0 (-44%)
Crossed SJR to South Delta	lomed	0%	0 (-65%)	0 (-52%)	0 (-52%)	0 (-19%)	0 (-26%)	0 (-79%)	0 (-48%)
Crossed SJR to South Delta	lohi	0%	0 (-55%)	0 (-40%)	0 (-37%)	0 (29%)	0 (56%)	0 (-27%)	0 (-45%)
Crossed SJR to South Delta	medlo	0%	0 (-46%)	0 (-46%)	0 (-48%)	0 (-12%)	0 (-27%)	0 (-97%)	0 (-52%)
Crossed SJR to South Delta	medmed	0%	0 (-9%)	0 (-53%)	0 (-39%)	0 (-9%)	0 (-21%)	0 (-92%)	0 (-37%)
Crossed SJR to South Delta	medhi	0%	0 (10%)	0 (-50%)	0 (-40%)	0 (36%)	0 (30%)	0 (-79%)	0 (-27%)
Crossed SJR to South Delta	hilo	0%	N/A	N/A	N/A	#N/A	#N/A	N/A	N/A
Crossed SJR to South Delta	himed	0%	0 (-50%)	0 (-100%)	0 (-100%)	0 (-55%)	0 (-100%)	0 (-100%)	0 (-100%)
Crossed SJR to South Delta	hihi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

I.8.4.3.6 Surface Oriented, Inflow Bins [EIS, Table I.8-47 through Table I.8-55]

Table I.8-47. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	0%	0 (-31%)	1 (3%)	1 (29%)	1 (6%)	1 (5%)	2 (302%)	0 (-5%)
West of Chipps	lomed	1%	1 (116%)	1 (27%)	1 (88%)	2 (328%)	2 (361%)	5 (895%)	0 (-8%)
West of Chipps	lohi	1%	2 (59%)	3 (135%)	4 (199%)	2 (21%)	2 (23%)	13 (800%)	12 (753%)
West of Chipps	medlo	0%	0 (-82%)	1 (8%)	1 (27%)	1 (26%)	1 (15%)	5 (1021%)	1 (13%)
West of Chipps	medmed	2%	0 (-83%)	2 (-1%)	2 (16%)	5 (166%)	5 (182%)	16 (851%)	1 (-17%)
West of Chipps	medhi	13%	5 (-64%)	12 (-7%)	12 (-7%)	19 (41%)	19 (44%)	58 (339%)	10 (-26%)
West of Chipps	hilo	2%	1 (-23%)	2 (12%)	2 (12%)	2 (13%)	2 (-14%)	8 (339%)	2 (11%)
West of Chipps	himed	6%	0 (-92%)	6 (1%)	6 (0%)	8 (31%)	8 (33%)	17 (188%)	6 (1%)
West of Chipps	hihi	39%	30 (-22%)	37 (-3%)	38 (-3%)	40 (3%)	39 (2%)	52 (34%)	37 (-5%)
Entrained at Exports	lolo	78%	84 (7%)	78 (1%)	77 (-1%)	77 (-1%)	77 (-1%)	63 (-19%)	79 (2%)
Entrained at Exports	lomed	84%	81 (-3%)	80 (-5%)	80 (-5%)	71 (-15%)	71 (-15%)	62 (-26%)	82 (-2%)
Entrained at Exports	lohi	86%	90 (4%)	80 (-8%)	76 (-11%)	85 (-1%)	84 (-2%)	50 (-42%)	54 (-37%)
Entrained at Exports	medlo	90%	88 (-2%)	88 (-2%)	88 (-2%)	88 (-2%)	87 (-3%)	64 (-28%)	90 (0%)
Entrained at Exports	medmed	88%	96 (8%)	88 (0%)	87 (-1%)	78 (-12%)	78 (-12%)	57 (-36%)	89 (1%)
Entrained at Exports	medhi	79%	92 (16%)	81 (2%)	81 (2%)	71 (-10%)	71 (-10%)	27 (-66%)	84 (6%)
Entrained at Exports	hilo	91%	91 (0%)	91 (-1%)	91 (-1%)	91 (-1%)	91 (0%)	79 (-14%)	91 (0%)
Entrained at Exports	himed	89%	99 (10%)	89 (0%)	89 (0%)	85 (-5%)	85 (-5%)	71 (-21%)	89 (0%)
Entrained at Exports	hihi	59%	69 (16%)	61 (2%)	61 (2%)	58 (-2%)	58 (-2%)	46 (-23%)	62 (4%)
Remaining in Delta	lolo	22%	16 (-26%)	21 (-3%)	23 (4%)	22 (2%)	22 (3%)	35 (63%)	20 (-7%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lomed	16%	18 (12%)	20 (24%)	20 (24%)	27 (69%)	27 (69%)	33 (107%)	17 (9%)
Remaining in Delta	lohi	12%	8 (-34%)	17 (38%)	19 (58%)	13 (5%)	14 (13%)	37 (205%)	34 (177%)
Remaining in Delta	medlo	10%	12 (19%)	12 (22%)	12 (21%)	12 (21%)	12 (23%)	30 (211%)	10 (-2%)
Remaining in Delta	medmed	10%	4 (-59%)	10 (0%)	11 (9%)	17 (75%)	17 (73%)	27 (171%)	9 (-8%)
Remaining in Delta	medhi	8%	4 (-52%)	7 (-11%)	7 (-9%)	10 (35%)	10 (29%)	15 (100%)	6 (-19%)
Remaining in Delta	hilo	7%	8 (12%)	7 (5%)	7 (6%)	7 (5%)	7 (5%)	13 (93%)	7 (-3%)
Remaining in Delta	himed	5%	1 (-80%)	5 (7%)	5 (8%)	7 (46%)	7 (44%)	12 (151%)	5 (-6%)
Remaining in Delta	hihi	2%	1 (-47%)	2 (-11%)	2 (-12%)	2 (11%)	2 (14%)	3 (24%)	2 (-14%)
Crossed SJR to South Delta	lolo	51%	53 (4%)	51 (1%)	50 (-1%)	50 (-1%)	50 (-1%)	46 (-10%)	51 (1%)
Crossed SJR to South Delta	lomed	56%	55 (-2%)	55 (-3%)	55 (-3%)	51 (-10%)	51 (-10%)	46 (-19%)	56 (-1%)
Crossed SJR to South Delta	lohi	61%	62 (2%)	57 (-7%)	54 (-11%)	60 (-1%)	60 (-2%)	37 (-39%)	37 (-39%)
Crossed SJR to South Delta	medlo	54%	47 (-13%)	54 (-1%)	54 (-1%)	54 (-1%)	54 (-1%)	45 (-16%)	55 (2%)
Crossed SJR to South Delta	medmed	59%	61 (3%)	60 (0%)	59 (-1%)	54 (-9%)	54 (-9%)	40 (-33%)	60 (1%)
Crossed SJR to South Delta	medhi	55%	64 (17%)	56 (2%)	56 (2%)	48 (-12%)	48 (-12%)	7 (-87%)	59 (7%)
Crossed SJR to South Delta	hilo	56%	47 (-17%)	56 (-1%)	56 (-1%)	56 (-1%)	56 (0%)	50 (-12%)	57 (0%)
Crossed SJR to South Delta	himed	57%	61 (7%)	57 (0%)	57 (0%)	55 (-4%)	55 (-4%)	44 (-22%)	57 (0%)
Crossed SJR to South Delta	hihi	32%	41 (26%)	33 (4%)	33 (3%)	31 (-3%)	31 (-3%)	19 (-41%)	34 (7%)

Table I.8-48. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2 wTUCP woVA	Alt2 woTUCP woVA	Alt2 woTUCP DeltaVA	Alt2 woTUCP AllVA	ALT3	ALT4
West of Chipps	lolo	6%	6 (9%)	6 (2%)	6 (12%)	6 (2%)	6 (3%)	12 (119%)	5 (-2%)
West of Chipps	lomed	5%	7 (28%)	6 (11%)	7 (32%)	10 (83%)	10 (88%)	14 (162%)	5 (-2%)
West of Chipps	lohi	4%	4 (6%)	5 (24%)	6 (55%)	4 (1%)	4 (9%)	12 (216%)	14 (261%)
West of Chipps	medlo	5%	2 (-53%)	5 (8%)	5 (12%)	5 (9%)	5 (8%)	17 (259%)	5 (8%)
West of Chipps	medmed	7%	3 (-52%)	7 (3%)	8 (9%)	10 (45%)	11 (46%)	24 (231%)	7 (-2%)
West of Chipps	medhi	11%	6 (-41%)	11 (-1%)	11 (-1%)	13 (25%)	13 (25%)	50 (364%)	10 (-11%)
West of Chipps	hilo	8%	2 (-74%)	8 (1%)	8 (2%)	8 (1%)	8 (-1%)	16 (99%)	8 (3%)
West of Chipps	himed	10%	3 (-66%)	10 (2%)	10 (2%)	11 (11%)	11 (11%)	20 (101%)	10 (0%)
West of Chipps	hihi	26%	24 (-9%)	26 (-2%)	26 (-2%)	27 (2%)	27 (2%)	46 (73%)	25 (-5%)
Entrained at Exports	lolo	86%	89 (3%)	87 (1%)	86 (0%)	86 (0%)	86 (0%)	75 (-13%)	86 (1%)
Entrained at Exports	lomed	89%	87 (-2%)	87 (-2%)	85 (-5%)	82 (-9%)	82 (-9%)	74 (-18%)	89 (-1%)
Entrained at Exports	lohi	92%	92 (1%)	88 (-4%)	86 (-6%)	91 (0%)	91 (-1%)	73 (-21%)	69 (-24%)
Entrained at Exports	medlo	92%	96 (4%)	91 (-1%)	91 (-1%)	91 (-1%)	91 (-1%)	70 (-24%)	92 (-1%)
Entrained at Exports	medmed	90%	95 (5%)	90 (0%)	89 (-1%)	85 (-5%)	85 (-5%)	61 (-32%)	90 (0%)
Entrained at Exports	medhi	87%	93 (6%)	88 (0%)	88 (0%)	84 (-4%)	84 (-4%)	37 (-58%)	89 (2%)
Entrained at Exports	hilo	90%	97 (8%)	89 (0%)	90 (0%)	89 (0%)	89 (0%)	78 (-13%)	89 (-1%)
Entrained at Exports	himed	88%	96 (9%)	88 (0%)	88 (0%)	87 (-2%)	87 (-2%)	74 (-16%)	88 (0%)
Entrained at Exports	hihi	72%	75 (4%)	73 (1%)	72 (1%)	71 (-1%)	71 (-1%)	51 (-29%)	73 (2%)
Remaining in Delta	lolo	9%	5 (-37%)	8 (-9%)	8 (-5%)	8 (-4%)	8 (-3%)	13 (54%)	8 (-5%)

Exit Point	Flow Bin	NAA	ALT1	Alt2 wTUCP woVA	Alt2 woTUCP woVA	Alt2 woTUCP DeltaVA	Alt2 woTUCP AllVA	ALT3	ALT4
Remaining in Delta	lomed	5%	6 (10%)	7 (31%)	8 (46%)	8 (63%)	8 (61%)	12 (138%)	6 (11%)
Remaining in Delta	lohi	5%	4 (-19%)	7 (63%)	8 (82%)	5 (8%)	5 (7%)	15 (229%)	17 (266%)
Remaining in Delta	medlo	3%	2 (-31%)	3 (19%)	3 (17%)	3 (16%)	3 (19%)	12 (336%)	3 (7%)
Remaining in Delta	medmed	3%	2 (-36%)	3 (0%)	3 (11%)	4 (51%)	4 (47%)	15 (433%)	3 (-4%)
Remaining in Delta	medhi	2%	1 (-36%)	2 (-6%)	2 (-8%)	3 (36%)	3 (35%)	14 (635%)	2 (-13%)
Remaining in Delta	hilo	2%	1 (-53%)	2 (10%)	2 (4%)	3 (16%)	3 (17%)	6 (148%)	2 (12%)
Remaining in Delta	himed	2%	1 (-50%)	2 (-2%)	2 (-1%)	2 (17%)	2 (16%)	6 (225%)	2 (-5%)
Remaining in Delta	hihi	2%	1 (-17%)	2 (-5%)	2 (-5%)	2 (9%)	2 (10%)	4 (111%)	2 (-2%)
Crossed SJR to South Delta	lolo	-9%	-8 (-14%)	-9 (-1%)	-10 (5%)	-9 (0%)	-10 (2%)	-17 (82%)	-9 (-3%)
Crossed SJR to South Delta	lomed	-8%	-9 (17%)	-9 (18%)	-11 (34%)	-14 (71%)	-14 (72%)	-19 (132%)	-8 (2%)
Crossed SJR to South Delta	lohi	-6%	-6 (-4%)	-10 (61%)	-11 (89%)	-6 (2%)	-6 (6%)	-20 (244%)	-24 (304%)
Crossed SJR to South Delta	medlo	-6%	-3 (-52%)	-6 (12%)	-6 (13%)	-6 (9%)	-6 (10%)	-21 (262%)	-6 (8%)
Crossed SJR to South Delta	medmed	-8%	-4 (-51%)	-8 (2%)	-9 (8%)	-12 (43%)	-12 (44%)	-27 (235%)	-8 (-3%)
Crossed SJR to South Delta	medhi	-11%	-7 (-41%)	-11 (-1%)	-11 (-1%)	-14 (25%)	-14 (25%)	-54 (386%)	-10 (-10%)
Crossed SJR to South Delta	hilo	-8%	-2 (-73%)	-8 (1%)	-8 (2%)	-8 (1%)	-8 (0%)	-17 (101%)	-9 (3%)
Crossed SJR to South Delta	himed	-10%	-4 (-65%)	-11 (2%)	-11 (2%)	-12 (12%)	-12 (11%)	-22 (107%)	-10 (0%)
Crossed SJR to South Delta	hihi	-27%	-24 (-9%)	-26 (-2%)	-26 (-2%)	-27 (2%)	-27 (2%)	-47 (75%)	-25 (-5%)

Table I.8-49. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA	ALT3	ALT4
West of Chipps	lolo	0%	0 (-100%)	0 (-1%)	0 (-2%)	0 (9%)	0 (-100%)	0 (-24%)	0 (-32%)
West of Chipps	lomed	0%	N/A	0 (22%)	N/A	N/A	N/A	N/A	0 (-74%)
West of Chipps	lohi	0%	0 (23%)	0 (-100%)	0 (-174%)	0 (-50%)	0 (0%)	0 (-198%)	0 (-199%)
West of Chipps	medlo	0%	0 (-158%)	0 (-82%)	0 (58%)	0 (-37%)	0 (33%)	N/A	0 (-77%)
West of Chipps	medmed	0%	0 (-61%)	0 (-94%)	0 (-86%)	0 (124%)	0 (-67%)	N/A	0 (-221%)
West of Chipps	medhi	0%	0 (-293%)	0 (127%)	0 (-179%)	0 (-165%)	0 (27%)	N/A	0 (-38%)
West of Chipps	hilo	0%	0 (559%)	0 (-1165%)	0 (-1071%)	0 (-1121%)	0 (-419%)	N/A	0 (484%)
West of Chipps	himed	0%	0 (731%)	0 (1280%)	0 (1666%)	0 (666%)	0 (-1098%)	N/A	0 (44%)
West of Chipps	hihi	5%	5 (15%)	4 (-5%)	4 (-5%)	4 (-5%)	4 (-7%)	20 (351%)	4 (-13%)
Entrained at Exports	lolo	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Entrained at Exports	lomed	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	96 (-4%)	100 (0%)
Entrained at Exports	lohi	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA	ALT3	ALT4
Entrained at Exports	medlo	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	98 (-2%)	100 (0%)
Entrained at Exports	medmed	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	96 (-4%)	100 (0%)
Entrained at Exports	medhi	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	73 (-27%)	100 (0%)
Entrained at Exports	hilo	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	99 (-1%)	100 (0%)
Entrained at Exports	himed	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	97 (-3%)	100 (0%)
Entrained at Exports	hihi	95%	95 (-1%)	96 (0%)	96 (0%)	96 (0%)	96 (0%)	77 (-19%)	96 (1%)
Remaining in Delta	lolo	0%	0 (-94%)	0 (-41%)	0 (-28%)	0 (-33%)	0 (-77%)	0 (-13%)	0 (-34%)
Remaining in Delta	lomed	0%	N/A	0 (150%)	N/A	N/A	N/A	N/A	0 (67%)
Remaining in Delta	lohi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Remaining in Delta	medlo	0%	0 (-100%)	0 (478%)	0 (656%)	0 (983%)	0 (900%)	N/A	0 (225%)
Remaining in Delta	medmed	0%	0 (10%)	N/A	N/A	N/A	N/A	N/A	N/A
Remaining in Delta	medhi	0%	0 (-82%)	0 (-100%)	0 (-80%)	0 (120%)	0 (0%)	N/A	0 (-80%)
Remaining in Delta	hilo	0%	0 (224%)	0 (0%)	0 (5%)	0 (-43%)	0 (-24%)	N/A	0 (-14%)
Remaining in Delta	himed	0%	0 (-42%)	0 (-1%)	0 (16%)	N/A	N/A	N/A	0 (-31%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA	ALT3	ALT4
Remaining in Delta	hihi	0%	0 (59%)	0 (-5%)	0 (-5%)	0 (10%)	0 (19%)	2 (1088%)	0 (-1%)
Crossed SJR to South Delta	lolo	0%	0 (-100%)	0 (-11%)	0 (-15%)	0 (-22%)	0 (-100%)	0 (-68%)	0 (-46%)
Crossed SJR to South Delta	lomed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	lohi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	medlo	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	medmed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	medhi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	hilo	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA	ALT3	ALT4
Crossed SJR to South Delta	himed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	hihi	-5%	-5 (15%)	-4 (-5%)	-4 (-5%)	-4 (-5%)	-4 (-6%)	-21 (360%)	-4 (-13%)

Table I.8-50. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	31%	36 (14%)	33 (4%)	35 (12%)	43 (38%)	44 (40%)	54 (72%)	30 (-4%)
West of Chipps	lomed	25%	30 (19%)	28 (12%)	31 (23%)	26 (2%)	26 (4%)	50 (97%)	51 (101%)
West of Chipps	lohi	33%	21 (-35%)	33 (2%)	34 (4%)	34 (3%)	33 (2%)	61 (87%)	35 (6%)
West of Chipps	medlo	46%	29 (-35%)	46 (1%)	47 (3%)	54 (18%)	54 (19%)	70 (54%)	45 (-1%)
West of Chipps	medmed	67%	51 (-24%)	67 (-1%)	67 (-1%)	72 (8%)	73 (8%)	94 (40%)	64 (-5%)
West of Chipps	medhi	56%	23 (-58%)	55 (-1%)	55 (-1%)	55 (-2%)	55 (-2%)	68 (22%)	56 (0%)
West of Chipps	hilo	68%	38 (-44%)	69 (0%)	69 (0%)	70 (3%)	70 (3%)	76 (11%)	68 (0%)
West of Chipps	himed	89%	78 (-12%)	88 (0%)	88 (0%)	89 (1%)	89 (0%)	91 (3%)	88 (-1%)
West of Chipps	hihi	46%	49 (7%)	46 (0%)	44 (-3%)	46 (0%)	45 (-2%)	23 (-49%)	48 (4%)
Entrained at Exports	Lolo	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Entrained at Exports	lomed	43%	42 (-4%)	38 (-13%)	38 (-13%)	29 (-33%)	29 (-33%)	25 (-43%)	43 (-2%)
Entrained at Exports	lohi	49%	49 (0%)	36 (-27%)	31 (-36%)	48 (-3%)	47 (-5%)	10 (-80%)	11 (-77%)
Entrained at Exports	medlo	56%	71 (27%)	53 (-4%)	53 (-4%)	54 (-4%)	54 (-4%)	22 (-61%)	53 (-5%)
Entrained at Exports	medmed	42%	62 (48%)	41 (-1%)	40 (-3%)	33 (-22%)	33 (-22%)	16 (-61%)	42 (2%)
Entrained at Exports	medhi	26%	43 (64%)	27 (3%)	27 (2%)	21 (-19%)	21 (-19%)	2 (-94%)	30 (14%)
Entrained at Exports	hilo	39%	74 (90%)	39 (0%)	39 (0%)	39 (1%)	40 (2%)	26 (-33%)	38 (-1%)
Entrained at Exports	himed	28%	59 (114%)	27 (-2%)	27 (-1%)	25 (-8%)	25 (-8%)	19 (-31%)	28 (1%)
Entrained at Exports	hihi	10%	21 (101%)	11 (3%)	11 (3%)	10 (-6%)	10 (-4%)	8 (-25%)	11 (10%)
Remaining in Delta	lolo	27%	19 (-29%)	26 (-3%)	27 (-1%)	27 (-1%)	28 (2%)	32 (16%)	26 (-5%)
Remaining in Delta	lomed	25%	22 (-12%)	29 (17%)	27 (8%)	28 (10%)	27 (7%)	21 (-16%)	27 (8%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	26%	21 (-19%)	36 (40%)	37 (46%)	27 (4%)	27 (6%)	40 (58%)	38 (49%)
Remaining in Delta	medlo	12%	8 (-30%)	13 (13%)	13 (10%)	13 (8%)	13 (13%)	17 (46%)	12 (6%)
Remaining in Delta	medmed	13%	9 (-31%)	13 (-1%)	13 (0%)	14 (7%)	13 (4%)	13 (6%)	13 (-1%)
Remaining in Delta	medhi	6%	6 (-10%)	6 (-3%)	6 (-4%)	6 (-3%)	6 (-6%)	4 (-37%)	6 (-1%)
Remaining in Delta	hilo	5%	3 (-51%)	6 (4%)	6 (3%)	6 (8%)	6 (9%)	6 (9%)	6 (5%)
Remaining in Delta	himed	4%	3 (-30%)	4 (6%)	4 (6%)	4 (9%)	4 (7%)	5 (21%)	4 (2%)
Remaining in Delta	hihi	1%	1 (-3%)	1 (-7%)	1 (-6%)	1 (-2%)	1 (3%)	1 (-20%)	1 (-1%)
Crossed SJR to South Delta	lolo	57%	58 (2%)	57 (0%)	55 (-3%)	57 (0%)	56 (-1%)	37 (-35%)	58 (2%)
Crossed SJR to South Delta	lomed	54%	52 (-4%)	50 (-8%)	48 (-10%)	40 (-25%)	40 (-25%)	34 (-37%)	54 (0%)
Crossed SJR to South Delta	lohi	60%	58 (-4%)	46 (-23%)	42 (-31%)	59 (-2%)	58 (-3%)	20 (-66%)	19 (-68%)
Crossed SJR to South Delta	medlo	61%	75 (22%)	60 (-3%)	59 (-3%)	60 (-2%)	60 (-2%)	30 (-51%)	59 (-4%)
Crossed SJR to South Delta	medmed	48%	66 (39%)	47 (-1%)	47 (-3%)	39 (-18%)	39 (-18%)	23 (-52%)	48 (1%)
Crossed SJR to South Delta	medhi	30%	46 (56%)	30 (1%)	30 (1%)	25 (-17%)	25 (-17%)	4 (-88%)	33 (12%)
Crossed SJR to South Delta	hilo	42%	76 (80%)	42 (1%)	42 (1%)	43 (2%)	43 (2%)	30 (-30%)	42 (-1%)
Crossed SJR to South Delta	himed	30%	61 (103%)	30 (-1%)	30 (-1%)	28 (-7%)	28 (-7%)	22 (-27%)	30 (1%)
Crossed SJR to South Delta	hihi	11%	21 (93%)	11 (2%)	11 (3%)	10 (-6%)	11 (-4%)	8 (-25%)	12 (9%)

Table I.8-51. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	58%	59 (2%)	59 (2%)	60 (3%)	58 (0%)	58 (0%)	73 (26%)	58 (0%)
West of Chipps	lomed	68%	69 (2%)	67 (-1%)	69 (2%)	75 (10%)	75 (11%)	81 (21%)	65 (-3%)
West of Chipps	lohi	50%	52 (5%)	46 (-9%)	48 (-4%)	51 (1%)	51 (3%)	62 (24%)	65 (29%)
West of Chipps	medlo	76%	63 (-17%)	76 (0%)	76 (0%)	77 (1%)	76 (-1%)	89 (17%)	78 (3%)
West of Chipps	medmed	84%	75 (-10%)	85 (0%)	85 (1%)	87 (3%)	87 (3%)	92 (10%)	85 (1%)
West of Chipps	medhi	94%	90 (-4%)	94 (0%)	93 (0%)	94 (1%)	94 (1%)	98 (5%)	93 (-1%)
West of Chipps	hilo	93%	79 (-15%)	93 (0%)	93 (0%)	92 (-1%)	92 (-1%)	95 (2%)	93 (0%)
West of Chipps	himed	96%	88 (-8%)	96 (0%)	96 (0%)	96 (0%)	96 (0%)	97 (1%)	96 (0%)
West of Chipps	hihi	99%	98 (-1%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)
Entrained at Exports	lolo	15%	21 (35%)	15 (-3%)	14 (-6%)	15 (-1%)	15 (-3%)	6 (-61%)	16 (4%)
Entrained at Exports	lomed	11%	14 (26%)	9 (-15%)	9 (-15%)	7 (-36%)	7 (-36%)	7 (-40%)	12 (6%)
Entrained at Exports	lohi	16%	19 (18%)	12 (-27%)	10 (-37%)	15 (-7%)	15 (-8%)	3 (-84%)	3 (-79%)
Entrained at Exports	medlo	15%	28 (90%)	14 (-4%)	14 (-3%)	14 (-4%)	14 (-3%)	4 (-72%)	12 (-16%)
Entrained at Exports	medmed	8%	17 (104%)	8 (-2%)	8 (-3%)	7 (-20%)	7 (-21%)	3 (-70%)	8 (-6%)
Entrained at Exports	medhi	3%	7 (107%)	4 (2%)	4 (4%)	3 (-19%)	3 (-19%)	0 (-96%)	4 (18%)
Entrained at Exports	hilo	5%	19 (273%)	5 (5%)	5 (5%)	5 (7%)	5 (7%)	3 (-39%)	5 (-1%)
Entrained at Exports	himed	3%	10 (277%)	3 (0%)	3 (0%)	2 (-8%)	3 (-7%)	2 (-33%)	3 (1%)
Entrained at Exports	hihi	1%	2 (182%)	1 (2%)	1 (2%)	1 (-9%)	1 (-4%)	0 (-27%)	1 (14%)
Remaining in Delta	lolo	27%	20 (-25%)	26 (-3%)	26 (-3%)	27 (0%)	27 (2%)	21 (-21%)	26 (-2%)
Remaining in Delta	lomed	21%	17 (-21%)	24 (11%)	22 (3%)	18 (-14%)	18 (-17%)	12 (-45%)	23 (8%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	34%	29 (-16%)	42 (26%)	42 (23%)	34 (1%)	34 (0%)	35 (5%)	32 (-5%)
Remaining in Delta	medlo	9%	9 (1%)	10 (10%)	10 (6%)	9 (2%)	10 (9%)	7 (-25%)	9 (2%)
Remaining in Delta	medmed	7%	7 (1%)	7 (-2%)	7 (-3%)	7 (-9%)	7 (-10%)	5 (-31%)	7 (0%)
Remaining in Delta	medhi	3%	3 (11%)	3 (-2%)	3 (0%)	3 (-6%)	3 (-8%)	2 (-30%)	3 (1%)
Remaining in Delta	hilo	2%	2 (13%)	2 (4%)	2 (4%)	2 (9%)	2 (9%)	2 (-13%)	2 (5%)
Remaining in Delta	himed	1%	2 (50%)	1 (9%)	1 (9%)	1 (5%)	1 (3%)	1 (10%)	1 (6%)
Remaining in Delta	hihi	0%	0 (22%)	0 (-1%)	0 (-1%)	0 (-1%)	0 (3%)	0 (-19%)	0 (6%)
Crossed SJR to South Delta	lolo	22%	27 (24%)	21 (-2%)	21 (-4%)	22 (0%)	21 (-1%)	11 (-48%)	22 (2%)
Crossed SJR to South Delta	lomed	16%	19 (18%)	15 (-9%)	14 (-12%)	11 (-31%)	11 (-31%)	10 (-40%)	17 (7%)
Crossed SJR to South Delta	lohi	26%	28 (9%)	20 (-24%)	18 (-32%)	25 (-4%)	24 (-5%)	8 (-71%)	7 (-72%)
Crossed SJR to South Delta	medlo	17%	31 (80%)	17 (-2%)	17 (-2%)	17 (-3%)	17 (-1%)	6 (-65%)	15 (-13%)
Crossed SJR to South Delta	medmed	10%	20 (89%)	10 (-1%)	10 (-2%)	9 (-18%)	9 (-18%)	4 (-63%)	10 (-5%)
Crossed SJR to South Delta	medhi	4%	8 (92%)	4 (0%)	4 (2%)	3 (-18%)	3 (-18%)	0 (-91%)	5 (14%)
Crossed SJR to South Delta	hilo	6%	20 (242%)	6 (5%)	6 (5%)	6 (8%)	6 (8%)	4 (-36%)	6 (0%)
Crossed SJR to South Delta	himed	3%	11 (254%)	3 (0%)	3 (0%)	3 (-7%)	3 (-6%)	2 (-29%)	3 (1%)
Crossed SJR to South Delta	hihi	1%	2 (170%)	1 (1%)	1 (2%)	1 (-8%)	1 (-3%)	1 (-27%)	1 (13%)

Table I.8-52. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	10%	13 (38%)	10 (5%)	11 (12%)	10 (4%)	10 (4%)	22 (125%)	10 (-2%)
West of Chipps	lomed	13%	16 (22%)	13 (6%)	16 (22%)	21 (68%)	22 (74%)	32 (154%)	12 (-6%)
West of Chipps	lohi	14%	17 (27%)	16 (17%)	19 (36%)	13 (-1%)	14 (3%)	34 (150%)	32 (133%)
West of Chipps	medlo	14%	7 (-53%)	14 (2%)	15 (5%)	14 (3%)	14 (0%)	38 (175%)	15 (5%)
West of Chipps	medmed	25%	11 (-54%)	25 (2%)	26 (5%)	34 (36%)	34 (39%)	52 (110%)	24 (-4%)
West of Chipps	medhi	50%	30 (-39%)	49 (-2%)	49 (-2%)	57 (14%)	58 (15%)	89 (77%)	45 (-11%)
West of Chipps	hilo	34%	7 (-78%)	33 (0%)	34 (0%)	33 (-2%)	32 (-4%)	49 (47%)	34 (2%)
West of Chipps	himed	51%	19 (-63%)	51 (1%)	51 (1%)	54 (6%)	54 (6%)	61 (21%)	50 (0%)
West of Chipps	hihi	82%	68 (-17%)	81 (-1%)	81 (-1%)	83 (1%)	83 (1%)	86 (5%)	80 (-2%)
Entrained at Exports	lolo	45%	60 (31%)	45 (0%)	44 (-4%)	45 (-1%)	44 (-3%)	23 (-49%)	47 (4%)
Entrained at Exports	lomed	47%	48 (2%)	41 (-13%)	41 (-13%)	31 (-34%)	31 (-34%)	26 (-45%)	45 (-4%)
Entrained at Exports	lohi	53%	59 (12%)	43 (-18%)	38 (-28%)	51 (-4%)	48 (-8%)	11 (-79%)	16 (-69%)
Entrained at Exports	medlo	65%	82 (26%)	61 (-6%)	61 (-6%)	61 (-5%)	61 (-6%)	26 (-59%)	63 (-3%)
Entrained at Exports	medmed	52%	75 (45%)	51 (-1%)	50 (-3%)	39 (-24%)	39 (-25%)	20 (-61%)	53 (3%)
Entrained at Exports	medhi	36%	59 (66%)	37 (4%)	37 (4%)	28 (-20%)	28 (-20%)	2 (-95%)	41 (16%)
Entrained at Exports	hilo	54%	88 (62%)	54 (-1%)	54 (-1%)	54 (0%)	55 (1%)	37 (-32%)	53 (-2%)
Entrained at Exports	himed	41%	77 (89%)	40 (-2%)	40 (-2%)	37 (-10%)	37 (-10%)	28 (-32%)	41 (1%)
Entrained at Exports	hihi	16%	30 (93%)	16 (4%)	16 (4%)	15 (-6%)	15 (-5%)	12 (-25%)	17 (11%)
Remaining in Delta	lolo	45%	27 (-40%)	44 (-1%)	46 (2%)	45 (1%)	46 (2%)	55 (23%)	43 (-3%)
Remaining in Delta	lomed	40%	36 (-9%)	46 (14%)	43 (9%)	47 (18%)	47 (16%)	41 (3%)	43 (7%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	34%	24 (-30%)	41 (21%)	44 (30%)	36 (6%)	38 (11%)	55 (62%)	52 (55%)
Remaining in Delta	medlo	21%	12 (-45%)	25 (16%)	25 (15%)	24 (14%)	25 (18%)	36 (66%)	22 (5%)
Remaining in Delta	medmed	24%	14 (-42%)	24 (0%)	24 (2%)	27 (16%)	27 (14%)	28 (19%)	23 (-3%)
Remaining in Delta	medhi	14%	11 (-26%)	14 (-3%)	14 (-4%)	14 (0%)	14 (-2%)	10 (-33%)	14 (-4%)
Remaining in Delta	hilo	12%	5 (-60%)	13 (4%)	12 (2%)	13 (4%)	13 (7%)	14 (13%)	13 (3%)
Remaining in Delta	himed	8%	4 (-51%)	9 (6%)	9 (6%)	9 (13%)	9 (11%)	11 (30%)	8 (-1%)
Remaining in Delta	hihi	3%	2 (-16%)	2 (-6%)	2 (-5%)	3 (-1%)	3 (4%)	2 (-17%)	2 (-2%)
Crossed SJR to South Delta	lolo	63%	71 (13%)	63 (0%)	62 (-2%)	63 (-1%)	62 (-2%)	45 (-28%)	64 (2%)
Crossed SJR to South Delta	lomed	66%	65 (-1%)	62 (-6%)	61 (-8%)	52 (-20%)	52 (-21%)	44 (-33%)	65 (-1%)
Crossed SJR to South Delta	lohi	68%	69 (1%)	59 (-14%)	54 (-21%)	68 (-1%)	66 (-3%)	29 (-57%)	31 (-55%)
Crossed SJR to South Delta	medlo	75%	87 (17%)	72 (-3%)	72 (-4%)	73 (-2%)	73 (-3%)	42 (-43%)	74 (-2%)
Crossed SJR to South Delta	medmed	63%	82 (29%)	63 (-1%)	62 (-2%)	53 (-17%)	52 (-17%)	33 (-47%)	65 (2%)
Crossed SJR to South Delta	medhi	43%	64 (50%)	43 (2%)	44 (2%)	35 (-17%)	35 (-17%)	6 (-87%)	48 (12%)
Crossed SJR to South Delta	hilo	61%	90 (48%)	61 (0%)	61 (0%)	61 (1%)	62 (1%)	44 (-27%)	60 (-1%)
Crossed SJR to South Delta	himed	46%	80 (74%)	45 (-1%)	45 (-1%)	42 (-8%)	42 (-8%)	34 (-26%)	46 (0%)
Crossed SJR to South Delta	hihi	17%	31 (84%)	17 (3%)	17 (3%)	16 (-5%)	16 (-4%)	13 (-25%)	19 (9%)

Table I.8-53. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	36%	39 (8%)	37 (3%)	38 (4%)	37 (2%)	37 (1%)	46 (27%)	36 (0%)
West of Chipps	lomed	40%	42 (5%)	39 (-3%)	41 (2%)	45 (11%)	46 (13%)	55 (35%)	39 (-5%)
West of Chipps	lohi	32%	35 (7%)	26 (-19%)	28 (-15%)	33 (3%)	34 (4%)	35 (8%)	34 (6%)
West of Chipps	medlo	54%	45 (-17%)	53 (-2%)	54 (-1%)	55 (1%)	53 (-2%)	61 (13%)	55 (2%)
West of Chipps	medmed	58%	53 (-8%)	58 (0%)	58 (1%)	59 (2%)	60 (3%)	63 (9%)	58 (1%)
West of Chipps	medhi	67%	64 (-4%)	66 (0%)	66 (0%)	67 (1%)	68 (1%)	69 (4%)	66 (0%)
West of Chipps	hilo	72%	64 (-11%)	72 (0%)	72 (0%)	72 (0%)	72 (0%)	73 (2%)	72 (0%)
West of Chipps	himed	76%	72 (-6%)	75 (-1%)	75 (-1%)	76 (0%)	76 (0%)	76 (0%)	76 (0%)
West of Chipps	hihi	78%	77 (-1%)	78 (0%)	78 (0%)	78 (0%)	78 (0%)	78 (0%)	77 (0%)
Entrained at Exports	lolo	7%	10 (42%)	7 (-4%)	6 (-8%)	7 (-2%)	6 (-5%)	3 (-63%)	7 (4%)
Entrained at Exports	lomed	5%	6 (33%)	4 (-17%)	4 (-16%)	3 (-36%)	3 (-36%)	3 (-36%)	5 (8%)
Entrained at Exports	lohi	8%	8 (12%)	7 (-13%)	6 (-26%)	7 (-13%)	6 (-20%)	1 (-84%)	2 (-71%)
Entrained at Exports	medlo	6%	14 (117%)	6 (-4%)	6 (-4%)	6 (-5%)	6 (-2%)	2 (-75%)	5 (-17%)
Entrained at Exports	medmed	3%	8 (131%)	3 (-2%)	3 (-3%)	3 (-21%)	3 (-21%)	1 (-76%)	3 (-9%)
Entrained at Exports	medhi	1%	3 (126%)	1 (0%)	1 (-2%)	1 (-24%)	1 (-26%)	0 (-96%)	1 (14%)
Entrained at Exports	hilo	1%	8 (514%)	1 (8%)	2 (11%)	2 (12%)	1 (9%)	1 (-40%)	1 (4%)
Entrained at Exports	himed	1%	4 (517%)	1 (-2%)	1 (-2%)	1 (-13%)	1 (-11%)	0 (-38%)	1 (0%)
Entrained at Exports	hihi	0%	0 (412%)	0 (-2%)	0 (1%)	0 (-15%)	0 (-4%)	0 (-31%)	0 (23%)
Remaining in Delta	lolo	57%	51 (-10%)	56 (-1%)	56 (-1%)	56 (-1%)	57 (0%)	51 (-10%)	56 (-1%)
Remaining in Delta	lomed	55%	51 (-6%)	57 (4%)	55 (0%)	52 (-5%)	51 (-7%)	43 (-23%)	56 (3%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	60%	57 (-5%)	67 (12%)	67 (11%)	60 (0%)	60 (0%)	64 (6%)	63 (6%)
Remaining in Delta	medlo	39%	41 (4%)	41 (3%)	40 (2%)	39 (0%)	40 (2%)	37 (-6%)	40 (1%)
Remaining in Delta	medmed	39%	39 (1%)	39 (0%)	39 (-1%)	38 (-2%)	38 (-3%)	36 (-8%)	39 (0%)
Remaining in Delta	medhi	32%	33 (4%)	32 (1%)	32 (1%)	32 (-1%)	32 (-2%)	31 (-3%)	32 (0%)
Remaining in Delta	hilo	27%	28 (4%)	27 (0%)	27 (1%)	27 (0%)	27 (0%)	26 (-2%)	27 (0%)
Remaining in Delta	himed	24%	25 (5%)	24 (2%)	24 (2%)	24 (1%)	24 (1%)	24 (1%)	24 (1%)
Remaining in Delta	hihi	22%	23 (1%)	22 (0%)	22 (0%)	22 (0%)	22 (0%)	22 (-2%)	22 (0%)
Crossed SJR to South Delta	lolo	12%	15 (25%)	12 (-3%)	11 (-5%)	12 (-1%)	12 (-2%)	6 (-46%)	12 (2%)
Crossed SJR to South Delta	lomed	9%	11 (19%)	8 (-8%)	8 (-10%)	6 (-28%)	6 (-29%)	5 (-39%)	10 (9%)
Crossed SJR to South Delta	lohi	14%	15 (7%)	12 (-11%)	12 (-16%)	13 (-5%)	13 (-9%)	5 (-65%)	6 (-58%)
Crossed SJR to South Delta	medlo	9%	18 (94%)	9 (-2%)	9 (-2%)	9 (-4%)	9 (-1%)	3 (-65%)	8 (-13%)
Crossed SJR to South Delta	medmed	5%	10 (97%)	5 (-1%)	5 (-2%)	4 (-17%)	4 (-18%)	2 (-63%)	5 (-5%)
Crossed SJR to South Delta	medhi	2%	4 (97%)	2 (-2%)	2 (-2%)	2 (-22%)	2 (-23%)	0 (-86%)	2 (8%)
Crossed SJR to South Delta	hilo	2%	10 (392%)	2 (8%)	2 (11%)	2 (11%)	2 (8%)	1 (-33%)	2 (5%)
Crossed SJR to South Delta	himed	1%	5 (388%)	1 (0%)	1 (0%)	1 (-11%)	1 (-11%)	1 (-30%)	1 (1%)
Crossed SJR to South Delta	hihi	0%	1 (257%)	0 (3%)	0 (3%)	0 (-11%)	0 (-6%)	0 (-33%)	0 (22%)

Table I.8-54. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	86%	90 (4%)	87 (1%)	87 (1%)	86 (0%)	86 (0%)	93 (8%)	86 (0%)
West of Chipps	lomed	92%	93 (1%)	91 (0%)	92 (0%)	94 (3%)	94 (3%)	96 (4%)	90 (-1%)
West of Chipps	lohi	84%	87 (4%)	83 (-1%)	84 (1%)	84 (1%)	84 (0%)	91 (9%)	93 (11%)
West of Chipps	medlo	93%	89 (-4%)	93 (0%)	93 (0%)	93 (0%)	93 (0%)	98 (5%)	94 (1%)
West of Chipps	medmed	96%	93 (-3%)	96 (0%)	96 (0%)	97 (0%)	97 (0%)	99 (2%)	97 (1%)
West of Chipps	medhi	99%	99 (-1%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	100 (0%)	99 (0%)
West of Chipps	hilo	99%	94 (-5%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)	99 (0%)
West of Chipps	himed	100%	98 (-2%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
West of Chipps	hihi	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Entrained at Exports	lolo	4%	4 (3%)	4 (-9%)	4 (-9%)	4 (-1%)	4 (-5%)	1 (-75%)	4 (0%)
Entrained at Exports	lomed	2%	3 (31%)	2 (-19%)	2 (-17%)	1 (-40%)	1 (-40%)	2 (-27%)	3 (22%)
Entrained at Exports	lohi	4%	4 (-4%)	2 (-49%)	2 (-63%)	4 (-11%)	4 (-15%)	0 (-93%)	0 (-94%)
Entrained at Exports	medlo	4%	8 (87%)	4 (-3%)	4 (-1%)	4 (-5%)	4 (-4%)	1 (-83%)	3 (-32%)
Entrained at Exports	medmed	2%	4 (135%)	2 (-2%)	2 (-2%)	1 (-12%)	2 (-12%)	0 (-84%)	1 (-30%)
Entrained at Exports	medhi	0%	1 (211%)	0 (11%)	0 (13%)	0 (-16%)	0 (-7%)	0 (-98%)	0 (41%)
Entrained at Exports	hilo	0%	5 (1302%)	0 (32%)	0 (30%)	0 (30%)	1 (35%)	0 (-56%)	0 (4%)
Entrained at Exports	himed	0%	2 (1628%)	0 (-3%)	0 (-2%)	0 (-10%)	0 (-1%)	0 (-48%)	0 (-10%)
Entrained at Exports	hihi	0%	0 (2262%)	0 (0%)	0 (-5%)	0 (-15%)	0 (19%)	0 (-64%)	0 (109%)
Remaining in Delta	lolo	10%	6 (-37%)	9 (-3%)	9 (-2%)	10 (1%)	10 (3%)	6 (-40%)	10 (0%)
Remaining in Delta	lomed	6%	4 (-30%)	7 (12%)	6 (3%)	5 (-25%)	4 (-28%)	3 (-56%)	7 (14%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	12%	9 (-27%)	15 (23%)	14 (17%)	12 (0%)	12 (2%)	9 (-27%)	7 (-41%)
Remaining in Delta	medlo	3%	4 (15%)	3 (7%)	3 (5%)	3 (0%)	3 (5%)	1 (-55%)	3 (-3%)
Remaining in Delta	medmed	2%	3 (30%)	2 (-1%)	2 (-3%)	2 (-13%)	2 (-13%)	1 (-48%)	2 (-1%)
Remaining in Delta	medhi	1%	1 (30%)	1 (0%)	1 (4%)	1 (-4%)	1 (-7%)	0 (-26%)	1 (6%)
Remaining in Delta	hilo	0%	1 (147%)	0 (13%)	0 (17%)	0 (22%)	0 (17%)	0 (-14%)	0 (15%)
Remaining in Delta	himed	0%	1 (224%)	0 (7%)	0 (11%)	0 (2%)	0 (-8%)	0 (2%)	0 (4%)
Remaining in Delta	hihi	0%	0 (61%)	0 (4%)	0 (7%)	0 (6%)	0 (2%)	0 (-18%)	0 (11%)
Crossed SJR to South Delta	lolo	6%	6 (1%)	6 (-6%)	6 (-6%)	6 (1%)	6 (-2%)	2 (-66%)	6 (1%)
Crossed SJR to South Delta	lomed	3%	4 (25%)	3 (-14%)	3 (-14%)	2 (-39%)	2 (-39%)	2 (-32%)	4 (21%)
Crossed SJR to South Delta	lohi	7%	7 (-9%)	4 (-47%)	3 (-59%)	7 (-4%)	7 (-7%)	1 (-88%)	1 (-91%)
Crossed SJR to South Delta	medlo	5%	9 (83%)	5 (-2%)	5 (0%)	5 (-4%)	5 (-2%)	1 (-80%)	3 (-29%)
Crossed SJR to South Delta	medmed	2%	5 (126%)	2 (-2%)	2 (-3%)	2 (-14%)	2 (-13%)	0 (-81%)	2 (-25%)
Crossed SJR to South Delta	medhi	0%	1 (198%)	0 (7%)	0 (14%)	0 (-20%)	0 (-9%)	0 (-97%)	0 (34%)
Crossed SJR to South Delta	hilo	0%	6 (1140%)	1 (32%)	1 (30%)	1 (31%)	1 (34%)	0 (-53%)	0 (7%)
Crossed SJR to South Delta	himed	0%	2 (1578%)	0 (-1%)	0 (2%)	0 (-8%)	0 (1%)	0 (-44%)	0 (-8%)
Crossed SJR to South Delta	hihi	0%	0 (2112%)	0 (-5%)	0 (-12%)	0 (-22%)	0 (18%)	0 (-64%)	0 (101%)

Table I.8-55. Mean December through March surface-oriented particle fate by Inflow bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that Inflow bin.

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	lolo	89%	61 (-32%)	89 (0%)	89 (0%)	90 (2%)	91 (2%)	81 (-9%)	89 (1%)
West of Chipps	lomed	78%	61 (-21%)	79 (1%)	81 (4%)	78 (1%)	78 (1%)	79 (1%)	75 (-3%)
West of Chipps	lohi	83%	58 (-30%)	96 (16%)	97 (17%)	83 (1%)	83 (0%)	98 (18%)	98 (19%)
West of Chipps	medlo	86%	66 (-23%)	87 (1%)	87 (1%)	87 (1%)	87 (1%)	83 (-4%)	86 (0%)
West of Chipps	medmed	83%	72 (-14%)	82 (-2%)	81 (-2%)	82 (-1%)	83 (-1%)	82 (-1%)	82 (-2%)
West of Chipps	medhi	82%	78 (-5%)	81 (0%)	81 (0%)	83 (1%)	83 (2%)	87 (6%)	81 (-1%)
West of Chipps	hilo	95%	90 (-6%)	95 (0%)	95 (0%)	94 (-1%)	95 (0%)	94 (-1%)	95 (-1%)
West of Chipps	himed	97%	94 (-3%)	97 (0%)	97 (0%)	97 (0%)	97 (0%)	96 (-1%)	97 (0%)
West of Chipps	hihi	98%	98 (0%)	98 (0%)	98 (0%)	98 (0%)	98 (0%)	98 (0%)	98 (0%)
Entrained at Exports	lolo	0%	0 (55%)	0 (-9%)	0 (-10%)	0 (10%)	0 (-2%)	0 (-83%)	0 (1%)
Entrained at Exports	lomed	0%	0 (71%)	0 (-40%)	0 (-34%)	0 (-52%)	0 (-53%)	0 (-62%)	0 (12%)
Entrained at Exports	lohi	0%	0 (10%)	0 (-40%)	0 (-20%)	0 (-50%)	0 (-40%)	0 (-100%)	0 (-70%)
Entrained at Exports	medlo	0%	0 (141%)	0 (6%)	0 (15%)	0 (-8%)	0 (-12%)	0 (-92%)	0 (-49%)
Entrained at Exports	medmed	0%	0 (111%)	0 (0%)	0 (6%)	0 (-3%)	0 (-2%)	0 (-100%)	0 (-73%)
Entrained at Exports	medhi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Entrained at Exports	hilo	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Entrained at Exports	himed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Entrained at Exports	hihi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Remaining in Delta	lolo	11%	39 (250%)	11 (0%)	11 (0%)	10 (-13%)	9 (-17%)	19 (71%)	11 (-4%)
Remaining in Delta	lomed	22%	39 (72%)	21 (-5%)	19 (-14%)	22 (-2%)	22 (-3%)	21 (-4%)	25 (10%)

Exit Point	Flow Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
Remaining in Delta	lohi	17%	42 (142%)	4 (-77%)	3 (-82%)	17 (-4%)	17 (-1%)	2 (-86%)	2 (-89%)
Remaining in Delta	medlo	14%	34 (145%)	13 (-7%)	13 (-6%)	13 (-7%)	13 (-9%)	17 (23%)	14 (2%)
Remaining in Delta	medmed	17%	28 (67%)	18 (8%)	18 (10%)	18 (6%)	17 (3%)	18 (7%)	18 (9%)
Remaining in Delta	medhi	18%	22 (21%)	19 (2%)	19 (1%)	17 (-6%)	17 (-7%)	13 (-26%)	19 (3%)
Remaining in Delta	hilo	5%	10 (106%)	5 (6%)	5 (5%)	6 (12%)	5 (5%)	6 (12%)	5 (10%)
Remaining in Delta	himed	3%	6 (94%)	3 (2%)	3 (5%)	3 (-5%)	3 (-7%)	4 (19%)	3 (-4%)
Remaining in Delta	hihi	2%	2 (21%)	2 (0%)	2 (0%)	2 (0%)	2 (3%)	2 (-11%)	2 (4%)
Crossed SJR to South Delta	lolo	0%	0 (31%)	0 (-4%)	0 (1%)	0 (14%)	0 (8%)	0 (-72%)	0 (2%)
Crossed SJR to South Delta	lomed	0%	0 (53%)	0 (-34%)	0 (-33%)	0 (-51%)	0 (-54%)	0 (-65%)	0 (18%)
Crossed SJR to South Delta	lohi	0%	0 (-4%)	0 (-33%)	0 (-15%)	0 (-44%)	0 (-15%)	0 (-67%)	0 (-78%)
Crossed SJR to South Delta	medlo	0%	0 (119%)	0 (6%)	0 (17%)	0 (-5%)	0 (-9%)	0 (-91%)	0 (-55%)
Crossed SJR to South Delta	medmed	0%	0 (123%)	0 (3%)	0 (-4%)	0 (4%)	0 (2%)	0 (-97%)	0 (-61%)
Crossed SJR to South Delta	medhi	0%	0 (-8%)	0 (0%)	0 (-100%)	0 (0%)	0 (-100%)	0 (-100%)	0 (-100%)
Crossed SJR to South Delta	hilo	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	himed	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	hihi	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

I.8.4.3.7 Neutrally Buoyant, OMR Bins [EIS, Table I.8-56 through Table I.8-64]

Table I.8-56. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	10%	7 (-37%)	3 (-69%)	4 (-60%)	10 (-3%)	12 (14%)	6 (-46%)	3 (-69%)
West of Chipps	-3500	20%	12 (-41%)	13 (-35%)	13 (-34%)	17 (-16%)	16 (-19%)	5 (-76%)	11 (-43%)
West of Chipps	-5000	2%	13 (568%)	17 (740%)	17 (744%)	16 (704%)	15 (666%)	11 (446%)	13 (573%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	59%	56 (-5%)	56 (-4%)	58 (-1%)	57 (-2%)	58 (-1%)	51 (-13%)	56 (-5%)
Entrained at Exports	-3500	69%	72 (4%)	72 (5%)	72 (5%)	69 (0%)	71 (2%)	69 (0%)	73 (6%)
Entrained at Exports	-5000	88%	77 (-12%)	77 (-13%)	76 (-13%)	78 (-11%)	79 (-11%)	80 (-9%)	80 (-9%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	31%	38 (21%)	41 (31%)	38 (22%)	32 (5%)	30 (-2%)	43 (40%)	41 (33%)
Remaining in Delta	-3500	11%	16 (48%)	15 (35%)	15 (33%)	14 (27%)	13 (20%)	26 (139%)	15 (39%)
Remaining in Delta	-5000	10%	9 (-8%)	7 (-34%)	7 (-33%)	6 (-41%)	6 (-38%)	10 (-6%)	7 (-30%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	46%	48 (3%)	49 (5%)	48 (4%)	46 (-1%)	45 (-3%)	52 (13%)	49 (6%)
Crossed SJR to South Delta	-3500	46%	51 (12%)	50 (10%)	50 (10%)	48 (5%)	49 (7%)	60 (30%)	51 (12%)
Crossed SJR to South Delta	-5000	67%	55 (-18%)	53 (-20%)	53 (-20%)	54 (-18%)	55 (-17%)	53 (-20%)	55 (-18%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-57. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	13%	11 (-16%)	10 (-27%)	10 (-24%)	13 (2%)	14 (7%)	12 (-11%)	9 (-30%)
West of Chipps	-3500	13%	11 (-20%)	11 (-14%)	12 (-12%)	13 (-6%)	12 (-9%)	9 (-36%)	11 (-19%)
West of Chipps	-5000	6%	9 (64%)	10 (89%)	10 (89%)	10 (86%)	10 (79%)	10 (73%)	10 (82%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	73%	73 (0%)	74 (1%)	75 (2%)	74 (1%)	73 (0%)	72 (-2%)	74 (1%)
Entrained at Exports	-3500	83%	82 (-1%)	83 (0%)	83 (0%)	81 (-2%)	82 (-2%)	81 (-2%)	83 (1%)
Entrained at Exports	-5000	88%	86 (-3%)	85 (-4%)	85 (-4%)	86 (-3%)	86 (-3%)	88 (0%)	86 (-2%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	14%	16 (17%)	17 (22%)	15 (13%)	13 (-5%)	13 (-6%)	16 (19%)	17 (24%)
Remaining in Delta	-3500	4%	7 (98%)	6 (49%)	5 (47%)	7 (76%)	6 (68%)	10 (181%)	6 (56%)
Remaining in Delta	-5000	6%	5 (-17%)	4 (-30%)	4 (-29%)	4 (-34%)	4 (-30%)	2 (-61%)	4 (-40%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	-17%	-16 (-2%)	-15 (-8%)	-15 (-10%)	-17 (2%)	-17 (4%)	-17 (1%)	-15 (-11%)
Crossed SJR to South Delta	-3500	-14%	-12 (-13%)	-13 (-9%)	-13 (-8%)	-14 (-2%)	-14 (-5%)	-12 (-16%)	-12 (-13%)
Crossed SJR to South Delta	-5000	-7%	-10 (44%)	-11 (62%)	-11 (61%)	-11 (56%)	-11 (52%)	-10 (44%)	-11 (56%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-58. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	0%	0 (-23%)	0 (-61%)	0 (-100%)	0 (-15%)	0 (-15%)	0 (-100%)	0 (-100%)
West of Chipps	-3500	0%	0 (-1018%)	0 (-628%)	0 (-245%)	0 (-711%)	0 (-685%)	0 (-4459%)	0 (-123%)
West of Chipps	-5000	0%	0 (-218%)	0 (-163%)	0 (-197%)	0 (115%)	0 (-8%)	0 (-409%)	0 (51%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	99%	98 (-1%)	99 (-1%)	99 (0%)	99 (0%)	99 (0%)	96 (-3%)	98 (-1%)
Entrained at Exports	-3500	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Entrained at Exports	-5000	99%	100 (0%)	100 (0%)	100 (0%)	100 (1%)	100 (1%)	100 (1%)	100 (1%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	1%	2 (119%)	1 (71%)	1 (-7%)	1 (21%)	1 (24%)	4 (428%)	2 (105%)
Remaining in Delta	-3500	0%	0 (-21%)	0 (-7%)	0 (1%)	0 (134%)	0 (94%)	0 (240%)	0 (-42%)
Remaining in Delta	-5000	1%	0 (-49%)	0 (-88%)	0 (-88%)	0 (-91%)	0 (-92%)	0 (-99%)	0 (-92%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	0%	0 (-29%)	0 (-67%)	0 (-100%)	0 (-21%)	0 (-7%)	0 (-100%)	0 (-100%)
Crossed SJR to South Delta	-3500	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	-5000	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-59. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	55%	41 (-26%)	38 (-31%)	42 (-24%)	55 (0%)	57 (5%)	50 (-9%)	38 (-31%)
West of Chipps	-3500	71%	57 (-19%)	62 (-12%)	63 (-11%)	64 (-10%)	64 (-10%)	47 (-33%)	59 (-17%)
West of Chipps	-5000	38%	59 (54%)	67 (76%)	67 (76%)	66 (74%)	65 (70%)	64 (68%)	64 (69%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	15%	15 (3%)	14 (-1%)	15 (2%)	14 (-6%)	14 (-7%)	12 (-21%)	14 (-1%)
Entrained at Exports	-3500	19%	23 (23%)	22 (15%)	21 (13%)	21 (13%)	22 (16%)	21 (13%)	23 (24%)
Entrained at Exports	-5000	44%	28 (-36%)	23 (-48%)	23 (-48%)	25 (-43%)	26 (-41%)	27 (-39%)	26 (-42%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	31%	44 (45%)	48 (56%)	44 (43%)	31 (3%)	29 (-5%)	39 (26%)	48 (57%)
Remaining in Delta	-3500	11%	20 (86%)	16 (53%)	16 (47%)	15 (42%)	15 (38%)	31 (194%)	18 (70%)
Remaining in Delta	-5000	18%	13 (-26%)	10 (-45%)	10 (-45%)	9 (-51%)	9 (-48%)	9 (-49%)	10 (-43%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	29%	34 (20%)	35 (22%)	34 (19%)	28 (-1%)	27 (-5%)	27 (-5%)	35 (22%)
Crossed SJR to South Delta	-3500	24%	32 (33%)	29 (21%)	28 (19%)	28 (19%)	29 (21%)	34 (42%)	31 (31%)
Crossed SJR to South Delta	-5000	52%	34 (-34%)	27 (-48%)	27 (-48%)	29 (-44%)	30 (-42%)	31 (-40%)	30 (-43%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-60. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	77%	65 (-16%)	64 (-18%)	69 (-10%)	76 (-1%)	79 (2%)	67 (-13%)	63 (-18%)
West of Chipps	-3500	90%	84 (-7%)	87 (-3%)	88 (-2%)	86 (-5%)	87 (-4%)	67 (-25%)	86 (-4%)
West of Chipps	-5000	65%	82 (26%)	86 (32%)	86 (31%)	85 (31%)	84 (29%)	92 (42%)	87 (33%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	3%	3 (10%)	3 (-7%)	3 (-5%)	3 (-1%)	3 (-6%)	2 (-14%)	3 (-8%)
Entrained at Exports	-3500	3%	4 (36%)	3 (6%)	3 (3%)	4 (32%)	4 (30%)	5 (63%)	4 (19%)
Entrained at Exports	-5000	14%	6 (-58%)	5 (-65%)	5 (-65%)	6 (-57%)	7 (-54%)	3 (-78%)	5 (-66%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	20%	32 (61%)	34 (70%)	28 (40%)	21 (5%)	19 (-6%)	31 (54%)	34 (72%)
Remaining in Delta	-3500	7%	12 (72%)	9 (33%)	9 (25%)	10 (44%)	9 (32%)	28 (296%)	11 (48%)
Remaining in Delta	-5000	20%	12 (-43%)	9 (-55%)	9 (-55%)	9 (-57%)	9 (-54%)	5 (-78%)	8 (-59%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	8%	11 (34%)	11 (30%)	10 (17%)	9 (5%)	8 (-4%)	9 (11%)	11 (30%)
Crossed SJR to South Delta	-3500	5%	7 (43%)	5 (11%)	5 (6%)	6 (36%)	6 (31%)	11 (129%)	6 (25%)
Crossed SJR to South Delta	-5000	20%	9 (-55%)	7 (-64%)	7 (-64%)	8 (-58%)	9 (-55%)	4 (-78%)	7 (-66%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-61. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	33%	20 (-39%)	17 (-48%)	19 (-42%)	34 (3%)	38 (12%)	30 (-11%)	17 (-48%)
West of Chipps	-3500	56%	37 (-35%)	43 (-23%)	44 (-22%)	46 (-18%)	46 (-18%)	27 (-51%)	39 (-31%)
West of Chipps	-5000	19%	42 (118%)	52 (167%)	52 (167%)	52 (165%)	50 (156%)	47 (140%)	47 (144%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	16%	14 (-13%)	13 (-19%)	14 (-16%)	15 (-11%)	15 (-10%)	14 (-15%)	13 (-20%)
Entrained at Exports	-3500	24%	29 (19%)	27 (13%)	27 (13%)	27 (11%)	28 (16%)	28 (15%)	29 (19%)
Entrained at Exports	-5000	59%	39 (-35%)	34 (-43%)	34 (-44%)	36 (-40%)	37 (-38%)	36 (-40%)	37 (-38%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	50%	66 (30%)	70 (38%)	67 (33%)	51 (1%)	48 (-5%)	56 (12%)	70 (38%)
Remaining in Delta	-3500	19%	34 (78%)	29 (50%)	28 (47%)	27 (38%)	25 (32%)	45 (132%)	32 (66%)
Remaining in Delta	-5000	21%	19 (-9%)	15 (-31%)	15 (-31%)	13 (-40%)	14 (-36%)	17 (-17%)	16 (-25%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	38%	41 (7%)	42 (10%)	42 (9%)	37 (-3%)	36 (-7%)	38 (-1%)	43 (11%)
Crossed SJR to South Delta	-3500	34%	44 (29%)	40 (20%)	40 (18%)	39 (16%)	40 (19%)	48 (41%)	43 (28%)
Crossed SJR to South Delta	-5000	69%	47 (-32%)	40 (-43%)	40 (-43%)	41 (-40%)	43 (-38%)	45 (-35%)	44 (-37%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-62. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	42%	31 (-26%)	31 (-26%)	34 (-19%)	43 (2%)	45 (6%)	33 (-22%)	31 (-27%)
West of Chipps	-3500	59%	45 (-24%)	51 (-15%)	51 (-14%)	52 (-13%)	52 (-12%)	30 (-49%)	49 (-17%)
West of Chipps	-5000	33%	45 (35%)	46 (38%)	46 (38%)	49 (46%)	47 (41%)	60 (81%)	50 (50%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	1%	1 (-10%)	1 (-26%)	1 (-23%)	1 (-4%)	1 (-13%)	1 (-38%)	1 (-25%)
Entrained at Exports	-3500	1%	1 (37%)	1 (-8%)	1 (-11%)	1 (46%)	1 (41%)	1 (19%)	1 (9%)
Entrained at Exports	-5000	6%	2 (-65%)	2 (-70%)	2 (-70%)	2 (-57%)	3 (-54%)	1 (-89%)	2 (-73%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	57%	68 (19%)	68 (20%)	65 (14%)	56 (-1%)	54 (-4%)	67 (17%)	69 (21%)
Remaining in Delta	-3500	40%	53 (35%)	48 (22%)	48 (21%)	47 (19%)	46 (17%)	69 (74%)	50 (26%)
Remaining in Delta	-5000	61%	53 (-13%)	52 (-14%)	52 (-14%)	49 (-20%)	51 (-17%)	39 (-36%)	49 (-20%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	5%	6 (18%)	5 (18%)	5 (7%)	5 (4%)	4 (-6%)	4 (-9%)	6 (18%)
Crossed SJR to South Delta	-3500	2%	3 (38%)	2 (1%)	2 (-5%)	3 (41%)	3 (34%)	5 (99%)	3 (16%)
Crossed SJR to South Delta	-5000	10%	4 (-58%)	3 (-67%)	3 (-66%)	4 (-57%)	4 (-54%)	1 (-85%)	3 (-69%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-63. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	95%	91 (-4%)	90 (-5%)	93 (-2%)	95 (0%)	95 (1%)	93 (-1%)	90 (-5%)
West of Chipps	-3500	98%	97 (-1%)	98 (0%)	98 (0%)	97 (-1%)	98 (-1%)	94 (-4%)	97 (-1%)
West of Chipps	-5000	92%	96 (4%)	98 (6%)	98 (6%)	98 (6%)	98 (5%)	99 (7%)	98 (6%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	0%	0 (0%)	0 (-13%)	0 (-19%)	0 (5%)	0 (-7%)	0 (-53%)	0 (-17%)
Entrained at Exports	-3500	0%	0 (34%)	0 (-18%)	0 (-25%)	0 (49%)	0 (38%)	0 (-17%)	0 (-1%)
Entrained at Exports	-5000	2%	1 (-70%)	0 (-82%)	0 (-82%)	1 (-71%)	1 (-69%)	0 (-92%)	0 (-84%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	5%	8 (70%)	10 (102%)	7 (43%)	5 (2%)	4 (-9%)	6 (31%)	10 (100%)
Remaining in Delta	-3500	2%	3 (55%)	2 (25%)	2 (16%)	2 (36%)	2 (24%)	5 (225%)	2 (39%)
Remaining in Delta	-5000	6%	3 (-46%)	2 (-66%)	2 (-66%)	2 (-70%)	2 (-67%)	1 (-84%)	2 (-68%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	1%	2 (31%)	2 (28%)	1 (5%)	1 (7%)	1 (-5%)	1 (-30%)	2 (30%)
Crossed SJR to South Delta	-3500	1%	1 (36%)	0 (-9%)	0 (-16%)	1 (47%)	1 (34%)	1 (50%)	1 (9%)
Crossed SJR to South Delta	-5000	3%	1 (-65%)	1 (-80%)	1 (-80%)	1 (-72%)	1 (-69%)	0 (-91%)	1 (-82%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table I.8-64. Mean March through June neutrally buoyant particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	69%	59 (-14%)	66 (-5%)	62 (-10%)	70 (1%)	71 (3%)	67 (-3%)	65 (-6%)
West of Chipps	-3500	86%	69 (-19%)	77 (-10%)	78 (-9%)	77 (-10%)	77 (-10%)	61 (-29%)	74 (-13%)
West of Chipps	-5000	73%	73 (0%)	74 (2%)	74 (2%)	75 (2%)	73 (0%)	88 (20%)	79 (8%)
West of Chipps	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Entrained at Exports	-2000	0%	0 (-52%)	0 (-17%)	0 (-2%)	0 (46%)	0 (25%)	0 (-36%)	0 (-47%)
Entrained at Exports	-3500	0%	0 (-35%)	0 (-54%)	0 (-50%)	0 (1%)	0 (-11%)	0 (-44%)	0 (-59%)
Entrained at Exports	-5000	0%	0 (-87%)	0 (-95%)	0 (-93%)	0 (-67%)	0 (-73%)	0 (-100%)	0 (-93%)
Entrained at Exports	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Remaining in Delta	-2000	31%	41 (31%)	34 (11%)	38 (22%)	30 (-3%)	29 (-7%)	33 (7%)	35 (14%)
Remaining in Delta	-3500	14%	31 (114%)	23 (60%)	22 (55%)	23 (61%)	23 (59%)	39 (172%)	26 (79%)
Remaining in Delta	-5000	27%	27 (1%)	26 (-5%)	26 (-5%)	25 (-5%)	27 (1%)	12 (-55%)	21 (-21%)
Remaining in Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Crossed SJR to South Delta	-2000	0%	0 (-19%)	0 (18%)	0 (-21%)	0 (-3%)	0 (-28%)	0 (-44%)	0 (20%)
Crossed SJR to South Delta	-3500	0%	0 (-14%)	0 (-42%)	0 (-48%)	0 (61%)	0 (22%)	0 (131%)	0 (-34%)
Crossed SJR to South Delta	-5000	0%	0 (-80%)	0 (-87%)	0 (-84%)	0 (-71%)	0 (-74%)	0 (-99%)	0 (-90%)
Crossed SJR to South Delta	-5500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

I.8.4.3.8 Surface Oriented, OMR Bins [EIS, Table I.8-65 through Table I.8-73]

Table I.8-65. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at San Joaquin River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCP woVA	Alt2woTUCP woVA	Alt2woTUCP DeltaVA	Alt2woTUCP AllVA	ALT3	ALT4
West of Chipps	-2000	9%	13 (53%)	4 (-49%)	4 (-52%)	13 (53%)	14 (62%)	8 (-10%)	4 (-49%)
West of Chipps	-3500	12%	8 (-29%)	9 (-25%)	9 (-24%)	7 (-39%)	7 (-41%)	5 (-57%)	9 (-26%)
West of Chipps	-5000	6%	7 (11%)	9 (58%)	10 (59%)	10 (64%)	9 (58%)	11 (77%)	8 (25%)
West of Chipps	-5500	0%	3 (13553%)	0 (315%)	0 (250%)	0 (280%)	0 (227%)	0 (-50%)	2 (13125%)
Entrained at Exports	-2000	66%	66 (-1%)	69 (4%)	70 (6%)	61 (-8%)	62 (-7%)	66 (-1%)	69 (3%)
Entrained at Exports	-3500	78%	81 (4%)	81 (5%)	81 (5%)	82 (5%)	82 (6%)	82 (5%)	81 (4%)
Entrained at Exports	-5000	88%	88 (-1%)	85 (-4%)	85 (-4%)	85 (-4%)	85 (-3%)	85 (-4%)	87 (-1%)
Entrained at Exports	-5500	89%	93 (5%)	88 (-1%)	88 (-1%)	88 (-1%)	88 (-1%)	90 (2%)	87 (-2%)
Remaining in Delta	-2000	25%	21 (-15%)	27 (7%)	25 (1%)	26 (5%)	25 (-2%)	27 (6%)	27 (7%)
Remaining in Delta	-3500	10%	11 (6%)	10 (-7%)	10 (-6%)	11 (7%)	11 (7%)	13 (27%)	10 (-1%)
Remaining in Delta	-5000	6%	5 (-3%)	5 (-3%)	5 (-3%)	5 (-8%)	5 (-8%)	5 (-14%)	5 (-7%)
Remaining in Delta	-5500	11%	4 (-64%)	12 (6%)	12 (8%)	12 (5%)	12 (4%)	10 (-13%)	11 (-6%)
Crossed SJR to South Delta	-2000	44%	43 (-2%)	47 (7%)	49 (10%)	42 (-5%)	42 (-5%)	46 (4%)	47 (6%)
Crossed SJR to South Delta	-3500	51%	51 (1%)	53 (5%)	53 (4%)	53 (5%)	53 (5%)	53 (5%)	53 (4%)
Crossed SJR to South Delta	-5000	55%	55 (0%)	53 (-5%)	52 (-5%)	52 (-5%)	52 (-5%)	54 (-3%)	55 (0%)
Crossed SJR to South Delta	-5500	51%	57 (12%)	51 (1%)	51 (0%)	52 (1%)	51 (1%)	52 (2%)	52 (2%)

Table I.8-66. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Old and Middle River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	10%	13 (34%)	9 (-9%)	10 (-3%)	15 (45%)	14 (41%)	13 (31%)	9 (-11%)
West of Chipps	-3500	11%	8 (-24%)	10 (-5%)	10 (-5%)	9 (-13%)	9 (-15%)	9 (-19%)	10 (-9%)
West of Chipps	-5000	7%	6 (-12%)	8 (10%)	8 (11%)	8 (13%)	8 (11%)	10 (39%)	8 (14%)
West of Chipps	-5500	1%	4 (255%)	1 (13%)	1 (6%)	1 (1%)	1 (0%)	2 (96%)	2 (123%)
Entrained at Exports	-2000	81%	79 (-2%)	81 (1%)	81 (0%)	78 (-3%)	78 (-3%)	80 (-1%)	81 (0%)
Entrained at Exports	-3500	86%	88 (2%)	87 (1%)	87 (1%)	87 (1%)	88 (1%)	88 (1%)	88 (1%)
Entrained at Exports	-5000	91%	92 (1%)	90 (0%)	90 (0%)	90 (-1%)	90 (0%)	88 (-3%)	90 (-1%)
Entrained at Exports	-5500	97%	95 (-2%)	97 (0%)	97 (0%)	97 (0%)	97 (0%)	96 (-1%)	95 (-2%)
Remaining in Delta	-2000	9%	7 (-22%)	10 (1%)	9 (-1%)	7 (-21%)	8 (-20%)	7 (-27%)	10 (8%)
Remaining in Delta	-3500	3%	4 (30%)	3 (0%)	3 (1%)	3 (20%)	3 (20%)	4 (34%)	3 (0%)
Remaining in Delta	-5000	2%	2 (0%)	2 (-13%)	2 (-15%)	2 (-18%)	2 (-18%)	2 (-16%)	2 (-9%)
Remaining in Delta	-5500	2%	1 (-40%)	2 (-2%)	2 (-5%)	2 (0%)	2 (0%)	2 (4%)	2 (15%)
Crossed SJR to South Delta	-2000	-15%	-16 (10%)	-14 (-5%)	-14 (-2%)	-18 (21%)	-17 (19%)	-15 (6%)	-14 (-3%)
Crossed SJR to South Delta	-3500	-12%	-10 (-19%)	-11 (-6%)	-11 (-5%)	-10 (-12%)	-10 (-13%)	-10 (-15%)	-11 (-8%)
Crossed SJR to South Delta	-5000	-7%	-7 (-8%)	-8 (9%)	-8 (9%)	-8 (10%)	-8 (9%)	-10 (32%)	-9 (14%)
Crossed SJR to South Delta	-5500	-2%	-4 (150%)	-2 (10%)	-2 (4%)	-2 (3%)	-2 (3%)	-3 (69%)	-3 (94%)

Table I.8-67. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Southern Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
West of Chipps	-3500	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
West of Chipps	-5000	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
West of Chipps	-5500	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Entrained at Exports	-2000	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Entrained at Exports	-3500	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Entrained at Exports	-5000	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Entrained at Exports	-5500	100%	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)	100 (0%)
Remaining in Delta	-2000	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Remaining in Delta	-3500	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Remaining in Delta	-5000	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Remaining in Delta	-5500	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Crossed SJR to South Delta	-2000	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	-3500	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	-5000	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crossed SJR to South Delta	-5500	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table I.8-68. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Central Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	44%	55 (24%)	40 (-8%)	43 (-3%)	62 (41%)	59 (34%)	60 (37%)	39 (-10%)
West of Chipps	-3500	61%	47 (-23%)	60 (-2%)	60 (-2%)	55 (-9%)	55 (-10%)	51 (-17%)	57 (-7%)
West of Chipps	-5000	50%	43 (-14%)	54 (7%)	54 (8%)	55 (10%)	55 (9%)	66 (31%)	54 (8%)
West of Chipps	-5500	11%	37 (252%)	12 (10%)	11 (6%)	11 (4%)	11 (3%)	18 (74%)	21 (95%)
Entrained at Exports	-2000	24%	22 (-8%)	26 (9%)	25 (8%)	15 (-37%)	17 (-29%)	18 (-23%)	25 (5%)
Entrained at Exports	-3500	28%	37 (34%)	29 (7%)	29 (6%)	32 (17%)	32 (17%)	35 (26%)	31 (11%)
Entrained at Exports	-5000	42%	46 (9%)	39 (-7%)	39 (-7%)	39 (-8%)	39 (-7%)	29 (-31%)	38 (-9%)
Entrained at Exports	-5500	81%	58 (-28%)	80 (-1%)	80 (-1%)	80 (-1%)	80 (-1%)	72 (-11%)	69 (-14%)
Remaining in Delta	-2000	32%	24 (-27%)	34 (5%)	32 (-2%)	23 (-28%)	24 (-25%)	21 (-34%)	36 (11%)
Remaining in Delta	-3500	11%	16 (37%)	11 (-5%)	11 (-5%)	13 (10%)	13 (10%)	14 (26%)	12 (7%)
Remaining in Delta	-5000	8%	11 (40%)	7 (-9%)	7 (-12%)	6 (-20%)	6 (-20%)	5 (-37%)	8 (-1%)
Remaining in Delta	-5500	9%	4 (-51%)	8 (-2%)	8 (-2%)	9 (0%)	9 (2%)	10 (13%)	10 (15%)
Crossed SJR to South Delta	-2000	36%	32 (-11%)	39 (7%)	38 (4%)	25 (-33%)	27 (-26%)	29 (-21%)	38 (5%)
Crossed SJR to South Delta	-3500	33%	44 (35%)	35 (5%)	34 (5%)	38 (16%)	38 (16%)	42 (28%)	36 (11%)
Crossed SJR to South Delta	-5000	46%	51 (11%)	43 (-7%)	43 (-7%)	42 (-9%)	42 (-8%)	32 (-30%)	42 (-9%)
Crossed SJR to South Delta	-5500	85%	61 (-28%)	84 (-1%)	84 (-1%)	84 (0%)	85 (0%)	77 (-9%)	74 (-13%)

Table I.8-69. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Sacramento River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	67%	74 (10%)	65 (-4%)	69 (2%)	82 (22%)	79 (17%)	86 (28%)	64 (-5%)
West of Chipps	-3500	87%	75 (-14%)	89 (2%)	89 (1%)	85 (-2%)	85 (-2%)	83 (-5%)	87 (-1%)
West of Chipps	-5000	85%	77 (-9%)	85 (0%)	85 (1%)	86 (2%)	86 (2%)	94 (11%)	86 (2%)
West of Chipps	-5500	48%	80 (66%)	50 (5%)	49 (3%)	49 (2%)	49 (2%)	62 (28%)	58 (21%)
Entrained at Exports	-2000	6%	7 (11%)	7 (13%)	6 (7%)	3 (-53%)	4 (-40%)	3 (-47%)	6 (8%)
Entrained at Exports	-3500	5%	11 (137%)	5 (-1%)	5 (-1%)	6 (22%)	6 (22%)	7 (45%)	5 (9%)
Entrained at Exports	-5000	9%	13 (52%)	8 (-5%)	8 (-6%)	8 (-9%)	8 (-7%)	4 (-56%)	8 (-14%)
Entrained at Exports	-5500	35%	16 (-54%)	34 (-4%)	34 (-2%)	34 (-3%)	34 (-3%)	25 (-27%)	26 (-26%)
Remaining in Delta	-2000	27%	19 (-28%)	28 (6%)	25 (-7%)	15 (-44%)	17 (-35%)	11 (-59%)	30 (11%)
Remaining in Delta	-3500	8%	14 (77%)	6 (-17%)	7 (-14%)	9 (14%)	9 (14%)	10 (32%)	8 (1%)
Remaining in Delta	-5000	7%	10 (53%)	7 (1%)	6 (-2%)	6 (-15%)	6 (-15%)	2 (-63%)	6 (-4%)
Remaining in Delta	-5500	17%	5 (-73%)	16 (-5%)	17 (-4%)	17 (0%)	17 (0%)	13 (-24%)	16 (-6%)
Crossed SJR to South Delta	-2000	12%	12 (3%)	13 (9%)	12 (-1%)	6 (-49%)	8 (-37%)	6 (-48%)	13 (5%)
Crossed SJR to South Delta	-3500	7%	16 (133%)	6 (-4%)	6 (-4%)	8 (21%)	8 (20%)	10 (48%)	7 (8%)
Crossed SJR to South Delta	-5000	11%	17 (57%)	10 (-4%)	10 (-5%)	10 (-9%)	10 (-8%)	5 (-57%)	9 (-13%)
Crossed SJR to South Delta	-5500	40%	18 (-57%)	39 (-4%)	40 (-2%)	39 (-2%)	39 (-2%)	30 (-25%)	31 (-24%)

Table I.8-70. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Mokelumne River for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	26%	37 (42%)	21 (-20%)	22 (-15%)	44 (67%)	43 (62%)	40 (52%)	20 (-23%)
West of Chipps	-3500	45%	30 (-32%)	42 (-6%)	42 (-6%)	38 (-16%)	37 (-16%)	32 (-28%)	39 (-13%)
West of Chipps	-5000	33%	27 (-19%)	39 (16%)	39 (17%)	40 (21%)	40 (18%)	50 (49%)	38 (13%)
West of Chipps	-5500	2%	21 (910%)	3 (22%)	2 (13%)	2 (9%)	2 (6%)	5 (142%)	10 (394%)
Entrained at Exports	-2000	23%	26 (13%)	25 (9%)	27 (15%)	16 (-30%)	17 (-27%)	20 (-15%)	24 (3%)
Entrained at Exports	-3500	34%	46 (34%)	38 (10%)	37 (10%)	39 (15%)	39 (15%)	41 (20%)	38 (12%)
Entrained at Exports	-5000	53%	56 (7%)	48 (-8%)	48 (-8%)	48 (-9%)	49 (-7%)	40 (-23%)	49 (-7%)
Entrained at Exports	-5500	78%	73 (-6%)	78 (0%)	78 (0%)	79 (0%)	78 (0%)	73 (-6%)	69 (-11%)
Remaining in Delta	-2000	50%	36 (-28%)	54 (7%)	51 (1%)	40 (-21%)	40 (-20%)	40 (-20%)	56 (10%)
Remaining in Delta	-3500	21%	24 (14%)	20 (-3%)	21 (-3%)	23 (10%)	23 (10%)	27 (28%)	23 (7%)
Remaining in Delta	-5000	14%	17 (20%)	13 (-9%)	12 (-11%)	12 (-16%)	12 (-16%)	10 (-30%)	14 (-3%)
Remaining in Delta	-5500	20%	6 (-70%)	19 (-1%)	19 (-2%)	19 (-2%)	19 (-1%)	22 (10%)	20 (4%)
Crossed SJR to South Delta	-2000	43%	42 (-2%)	46 (7%)	48 (11%)	34 (-22%)	34 (-22%)	38 (-11%)	47 (8%)
Crossed SJR to South Delta	-3500	45%	57 (29%)	48 (7%)	47 (6%)	50 (13%)	50 (13%)	54 (21%)	49 (11%)
Crossed SJR to South Delta	-5000	59%	64 (8%)	54 (-8%)	54 (-9%)	54 (-10%)	54 (-8%)	46 (-23%)	55 (-7%)
Crossed SJR to South Delta	-5500	85%	76 (-11%)	85 (0%)	86 (0%)	86 (1%)	86 (0%)	82 (-3%)	77 (-9%)

Table I.8-71. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Yolo Bypass for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	42%	49 (16%)	40 (-5%)	43 (2%)	54 (27%)	52 (23%)	60 (40%)	39 (-7%)
West of Chipps	-3500	61%	51 (-17%)	63 (3%)	63 (3%)	62 (1%)	61 (1%)	60 (-1%)	61 (0%)
West of Chipps	-5000	65%	54 (-16%)	66 (2%)	66 (2%)	67 (4%)	67 (4%)	73 (13%)	65 (0%)
West of Chipps	-5500	34%	62 (80%)	36 (6%)	36 (4%)	35 (2%)	35 (3%)	46 (35%)	42 (23%)
Entrained at Exports	-2000	3%	3 (6%)	3 (16%)	3 (10%)	1 (-57%)	1 (-47%)	1 (-56%)	3 (11%)
Entrained at Exports	-3500	2%	5 (200%)	2 (-4%)	2 (-5%)	2 (24%)	2 (25%)	3 (54%)	2 (7%)
Entrained at Exports	-5000	3%	6 (66%)	3 (-6%)	3 (-7%)	3 (-12%)	3 (-9%)	1 (-66%)	3 (-15%)
Entrained at Exports	-5500	16%	7 (-57%)	16 (-4%)	16 (-3%)	16 (-4%)	16 (-3%)	11 (-33%)	12 (-28%)
Remaining in Delta	-2000	55%	48 (-12%)	56 (3%)	54 (-2%)	45 (-18%)	46 (-16%)	39 (-29%)	58 (5%)
Remaining in Delta	-3500	37%	44 (18%)	35 (-5%)	35 (-5%)	36 (-3%)	36 (-2%)	37 (0%)	37 (0%)
Remaining in Delta	-5000	32%	40 (26%)	31 (-2%)	31 (-3%)	30 (-7%)	29 (-7%)	26 (-20%)	32 (1%)
Remaining in Delta	-5500	49%	31 (-37%)	48 (-3%)	48 (-2%)	49 (0%)	49 (-1%)	43 (-13%)	46 (-7%)
Crossed SJR to South Delta	-2000	7%	7 (-3%)	8 (12%)	7 (1%)	4 (-48%)	4 (-39%)	3 (-52%)	8 (10%)
Crossed SJR to South Delta	-3500	3%	9 (166%)	3 (-7%)	3 (-6%)	4 (19%)	4 (19%)	5 (49%)	4 (9%)
Crossed SJR to South Delta	-5000	5%	9 (71%)	5 (-5%)	5 (-6%)	5 (-13%)	5 (-11%)	2 (-64%)	5 (-12%)
Crossed SJR to South Delta	-5500	22%	9 (-59%)	21 (-5%)	21 (-3%)	21 (-3%)	21 (-3%)	15 (-31%)	17 (-25%)

Table I.8-72. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Western Delta for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	90%	94 (5%)	90 (-1%)	91 (1%)	95 (6%)	94 (4%)	97 (8%)	90 (-1%)
West of Chipps	-3500	97%	95 (-3%)	98 (1%)	98 (0%)	96 (-1%)	96 (-1%)	96 (-1%)	97 (0%)
West of Chipps	-5000	96%	94 (-2%)	96 (0%)	96 (0%)	96 (0%)	96 (0%)	99 (3%)	96 (0%)
West of Chipps	-5500	77%	94 (23%)	78 (2%)	78 (1%)	77 (1%)	77 (1%)	86 (11%)	83 (9%)
Entrained at Exports	-2000	1%	1 (-8%)	1 (12%)	1 (-8%)	0 (-65%)	1 (-45%)	0 (-65%)	1 (-2%)
Entrained at Exports	-3500	1%	2 (177%)	1 (-13%)	1 (-9%)	1 (32%)	1 (32%)	1 (66%)	1 (-2%)
Entrained at Exports	-5000	2%	3 (48%)	2 (3%)	2 (3%)	2 (0%)	2 (-1%)	0 (-74%)	1 (-18%)
Entrained at Exports	-5500	14%	4 (-74%)	14 (-6%)	14 (-3%)	14 (-4%)	14 (-4%)	9 (-41%)	9 (-38%)
Remaining in Delta	-2000	9%	5 (-46%)	9 (8%)	8 (-12%)	4 (-51%)	6 (-35%)	3 (-71%)	9 (9%)
Remaining in Delta	-3500	2%	4 (69%)	2 (-23%)	2 (-17%)	3 (22%)	3 (23%)	3 (35%)	2 (-5%)
Remaining in Delta	-5000	2%	3 (33%)	2 (9%)	2 (7%)	2 (-11%)	2 (-13%)	1 (-70%)	2 (-5%)
Remaining in Delta	-5500	9%	2 (-79%)	8 (-8%)	8 (-6%)	9 (-1%)	9 (-1%)	6 (-33%)	8 (-13%)
Crossed SJR to South Delta	-2000	2%	2 (-10%)	3 (9%)	2 (-14%)	1 (-60%)	1 (-41%)	1 (-64%)	2 (-5%)
Crossed SJR to South Delta	-3500	1%	3 (174%)	1 (-16%)	1 (-10%)	1 (33%)	1 (32%)	2 (70%)	1 (-3%)
Crossed SJR to South Delta	-5000	2%	4 (54%)	2 (4%)	2 (4%)	2 (-1%)	2 (-1%)	1 (-74%)	2 (-17%)
Crossed SJR to South Delta	-5500	17%	4 (-74%)	16 (-6%)	17 (-4%)	17 (-3%)	17 (-3%)	11 (-38%)	11 (-35%)

Table I.8-73. Mean December through March surface-oriented particle fate by OMR bin for NAA, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4 – particle insertion location at Suisun Bay for all particle system exit points. Note that NA values result from no data falling into that OMR bin.

Exit Point	OMR Bin	NAA	ALT1	Alt2wTUCPwoVA	Alt2woTUCPwoVA	Alt2woTUCPDeltaVA	Alt2woTUCPAllVA	ALT3	ALT4
West of Chipps	-2000	91%	69 (-24%)	88 (-2%)	89 (-2%)	86 (-5%)	90 (-1%)	83 (-9%)	90 (0%)
West of Chipps	-3500	89%	70 (-22%)	88 (-1%)	89 (-1%)	91 (1%)	91 (2%)	86 (-4%)	85 (-5%)
West of Chipps	-5000	92%	72 (-21%)	94 (2%)	94 (2%)	94 (2%)	93 (2%)	94 (2%)	93 (1%)
West of Chipps	-5500	86%	84 (-3%)	87 (2%)	87 (2%)	87 (1%)	87 (1%)	91 (6%)	87 (1%)
Entrained at Exports	-2000	0%	0 (-5%)	0 (16%)	0 (12%)	0 (-73%)	0 (-41%)	0 (-87%)	0 (36%)
Entrained at Exports	-3500	0%	0 (278%)	0 (-36%)	0 (-32%)	0 (17%)	0 (48%)	0 (12%)	0 (-25%)
Entrained at Exports	-5000	0%	0 (138%)	0 (10%)	0 (14%)	0 (18%)	0 (-6%)	0 (-86%)	0 (-6%)
Entrained at Exports	-5500	0%	0 (-79%)	0 (-6%)	0 (-1%)	0 (-3%)	0 (-10%)	0 (-50%)	0 (-48%)
Remaining in Delta	-2000	9%	31 (229%)	12 (23%)	11 (15%)	14 (48%)	10 (9%)	17 (82%)	10 (2%)
Remaining in Delta	-3500	11%	30 (185%)	12 (9%)	11 (6%)	9 (-12%)	9 (-14%)	14 (30%)	15 (40%)
Remaining in Delta	-5000	8%	28 (234%)	6 (-22%)	6 (-23%)	6 (-22%)	7 (-20%)	6 (-25%)	7 (-11%)
Remaining in Delta	-5500	14%	16 (20%)	12 (-10%)	12 (-10%)	13 (-8%)	12 (-9%)	9 (-37%)	13 (-5%)
Crossed SJR to South Delta	-2000	0%	0 (-26%)	0 (-7%)	0 (-14%)	0 (-68%)	0 (-42%)	0 (-86%)	0 (-7%)
Crossed SJR to South Delta	-3500	0%	0 (285%)	0 (-33%)	0 (-20%)	0 (52%)	0 (73%)	0 (62%)	0 (-15%)
Crossed SJR to South Delta	-5000	0%	0 (136%)	0 (31%)	0 (31%)	0 (22%)	0 (-4%)	0 (-82%)	0 (4%)
Crossed SJR to South Delta	-5500	0%	0 (-81%)	0 (-10%)	0 (-5%)	0 (0%)	0 (-4%)	0 (-56%)	0 (-49%)

I.8.4.4 Figures

I.8.4.4.1 Neutrally Buoyant, Inflow and OMR Bins [BA, Figure I.8-2 through Figure I.8-19]

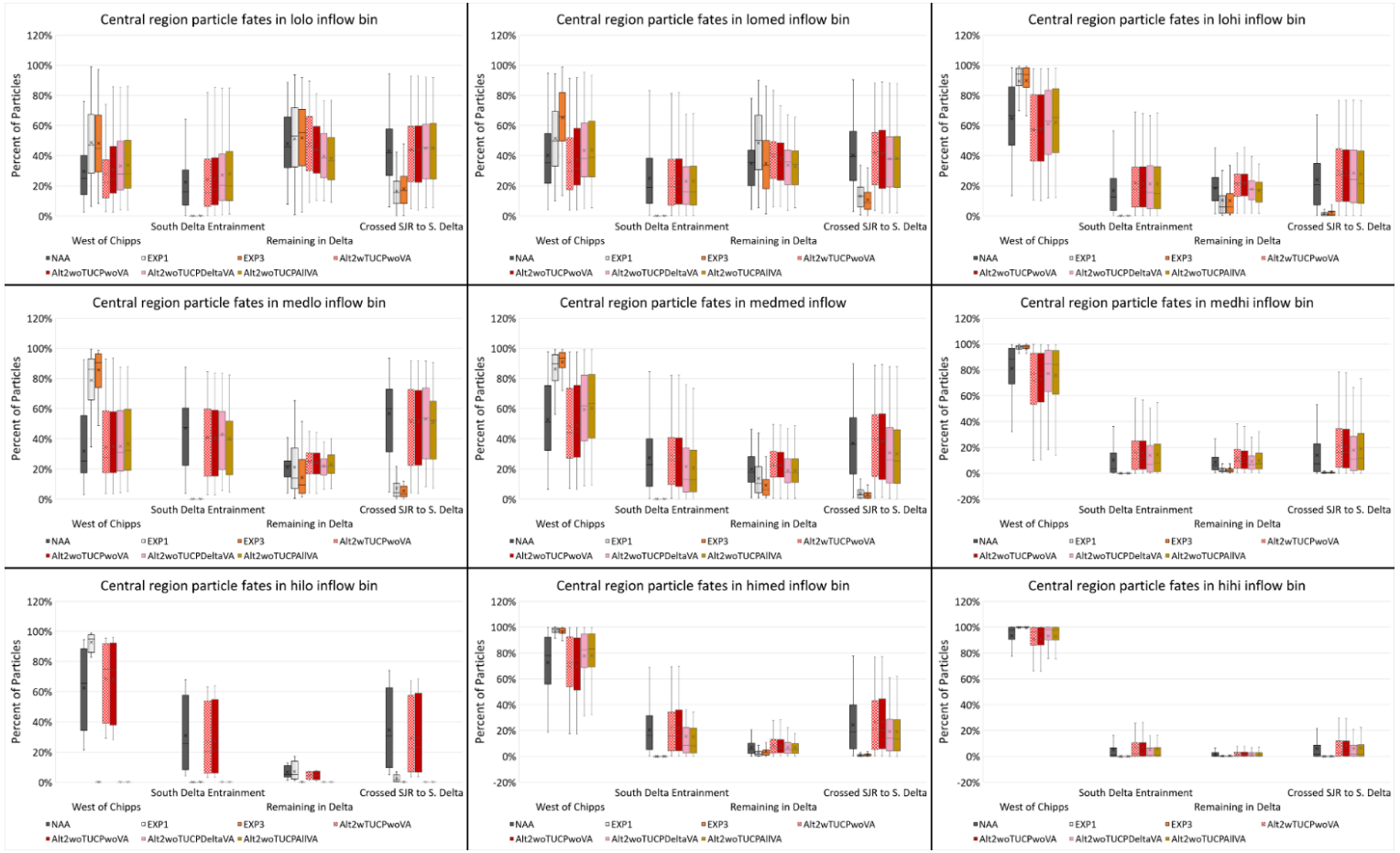

Figure I.8-2. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Central Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

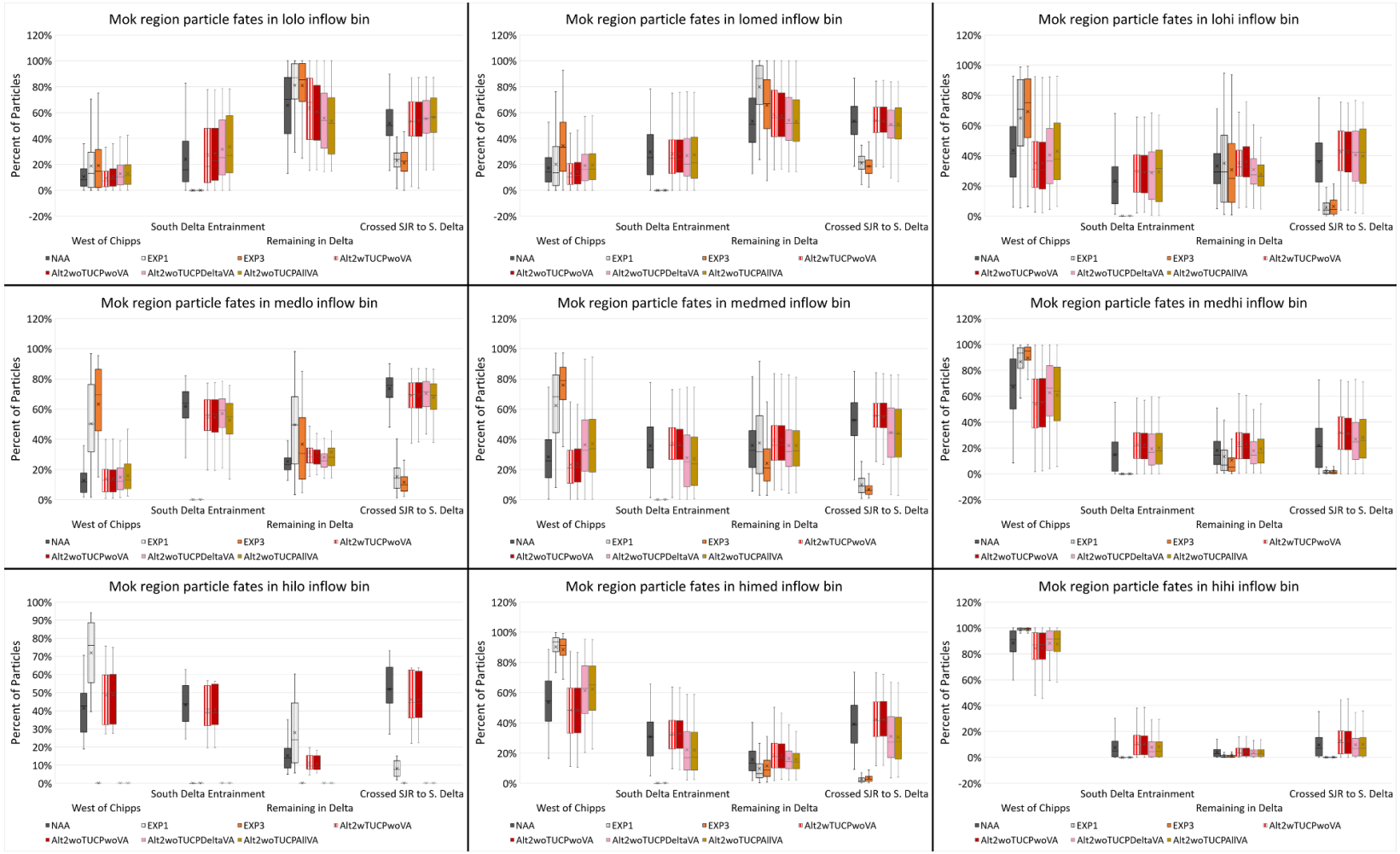

Figure I.8-3. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Mokelumne River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

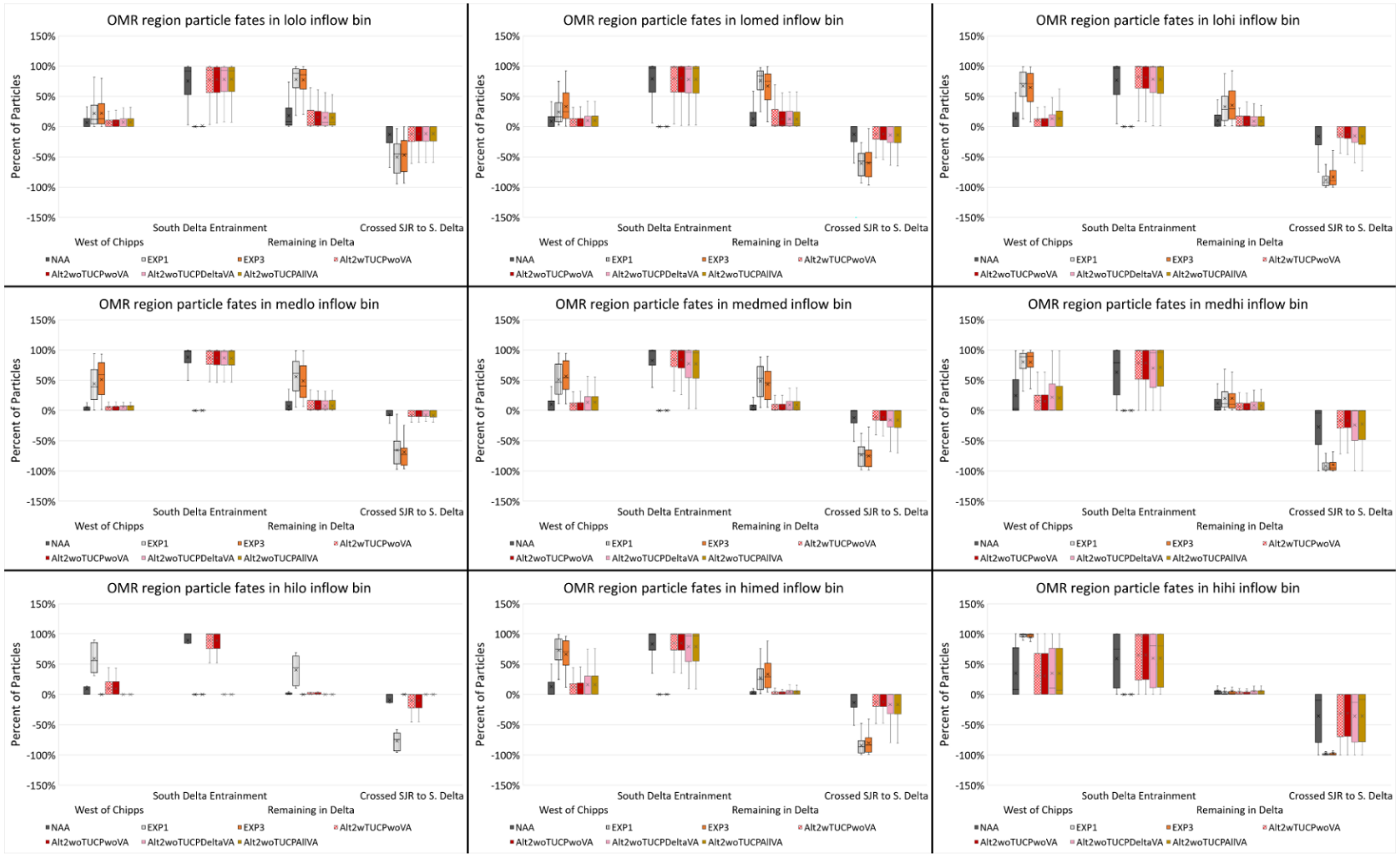

Figure I.8-4. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Old and Middle River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

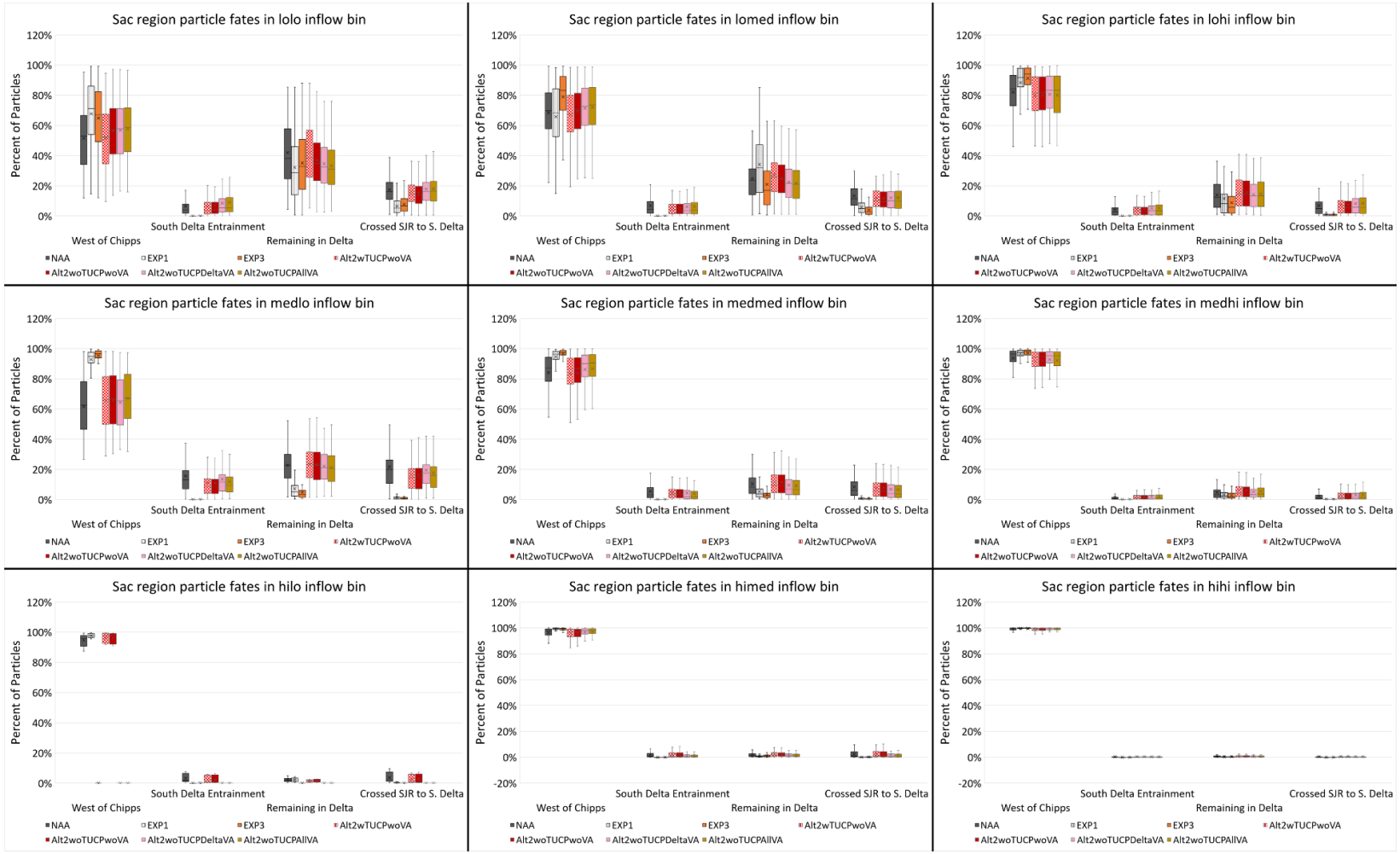

Figure I.8-5. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Sacramento River region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

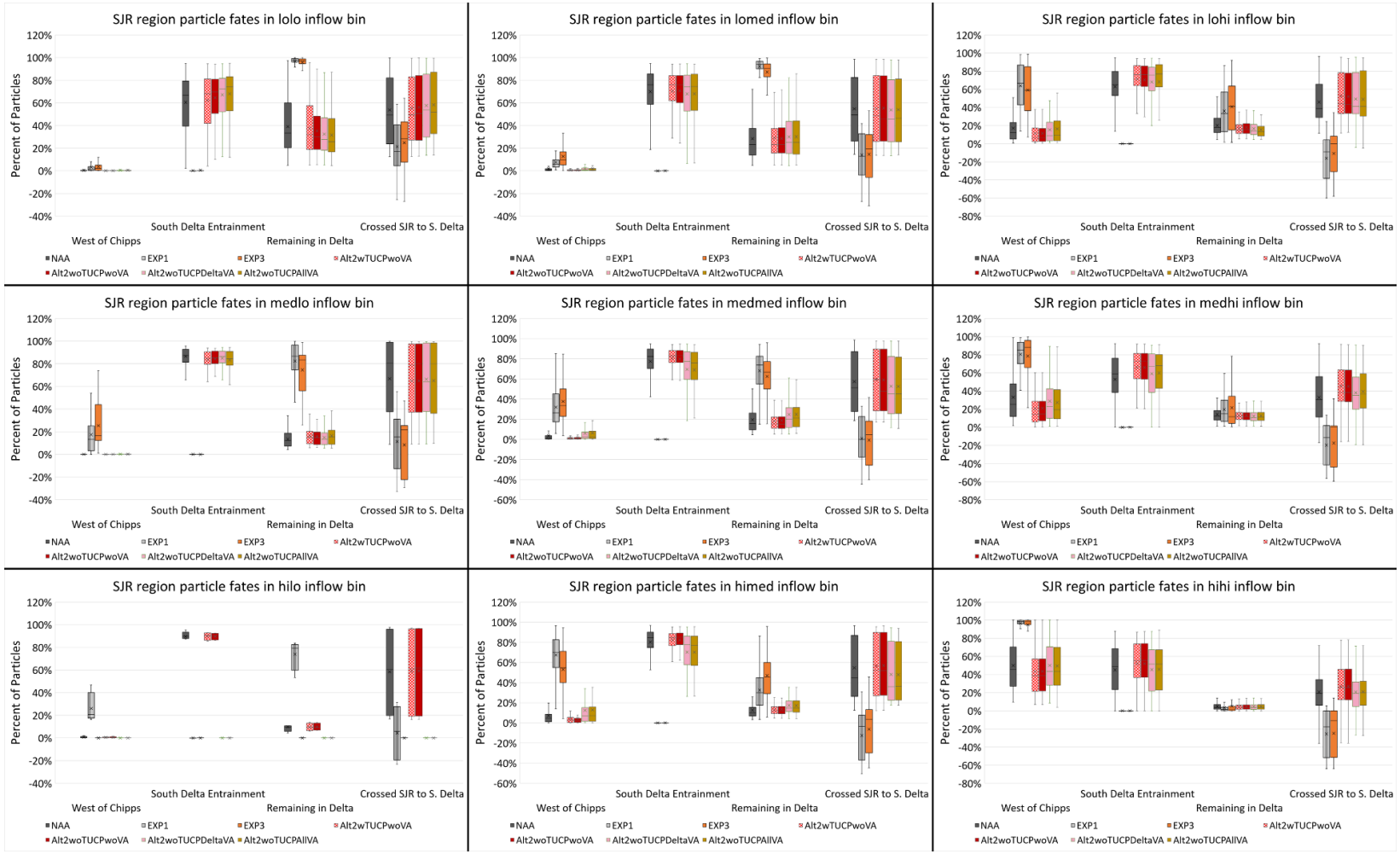

Figure I.8-6. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at San Joaquin River region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

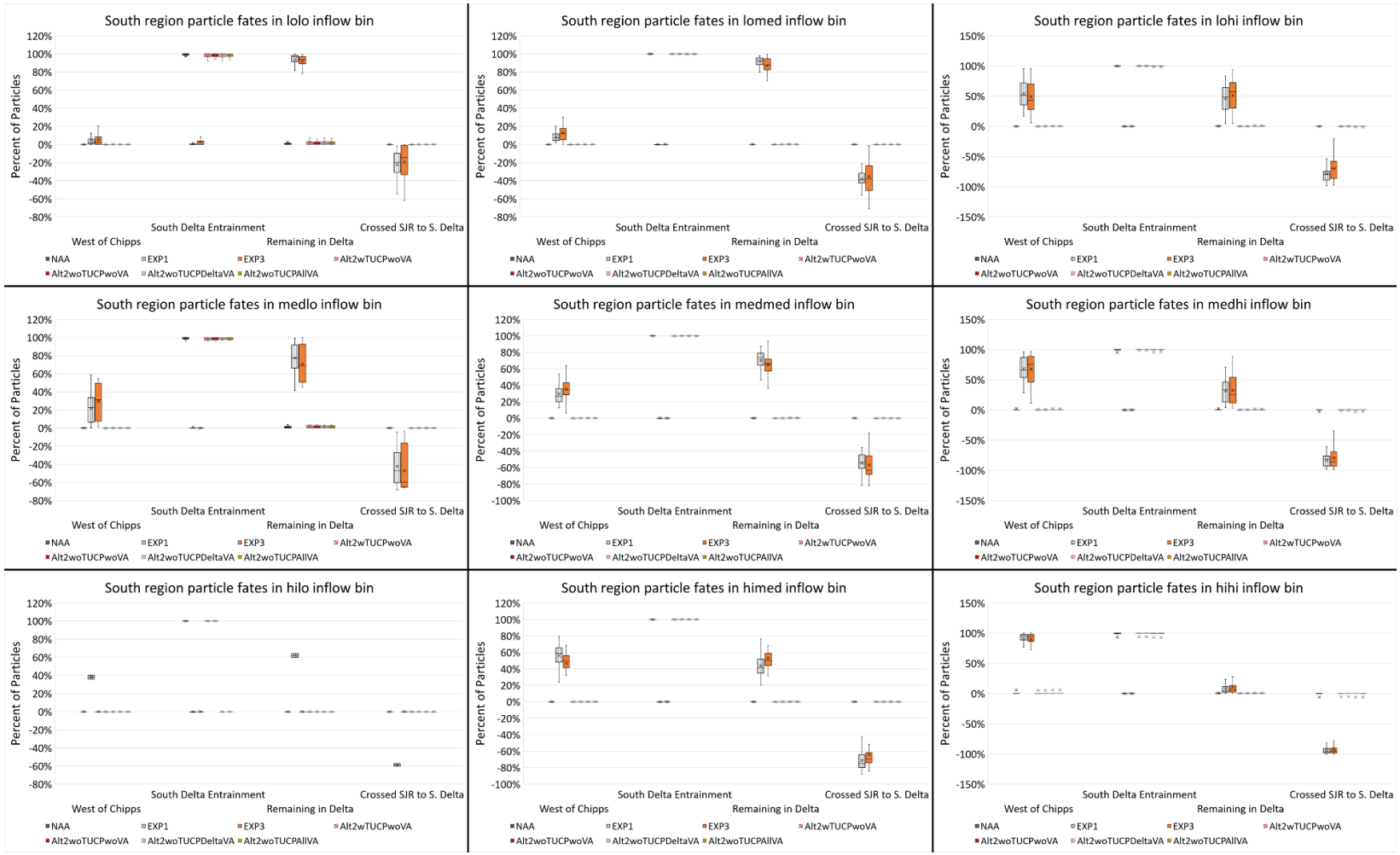

Figure I.8-7. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at South Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

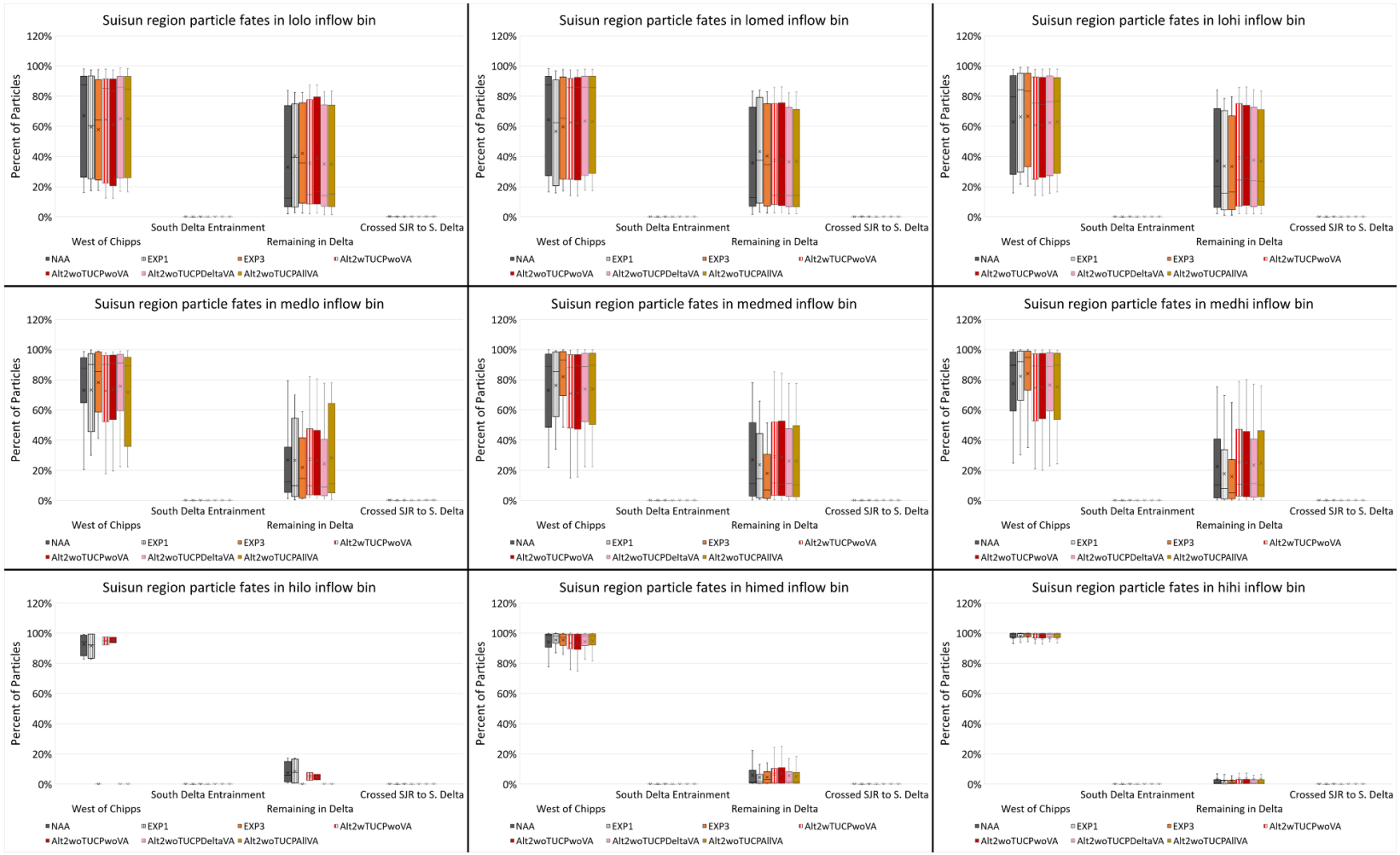

Figure I.8-8. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Suisun region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

Figure I.8-9. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at West Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

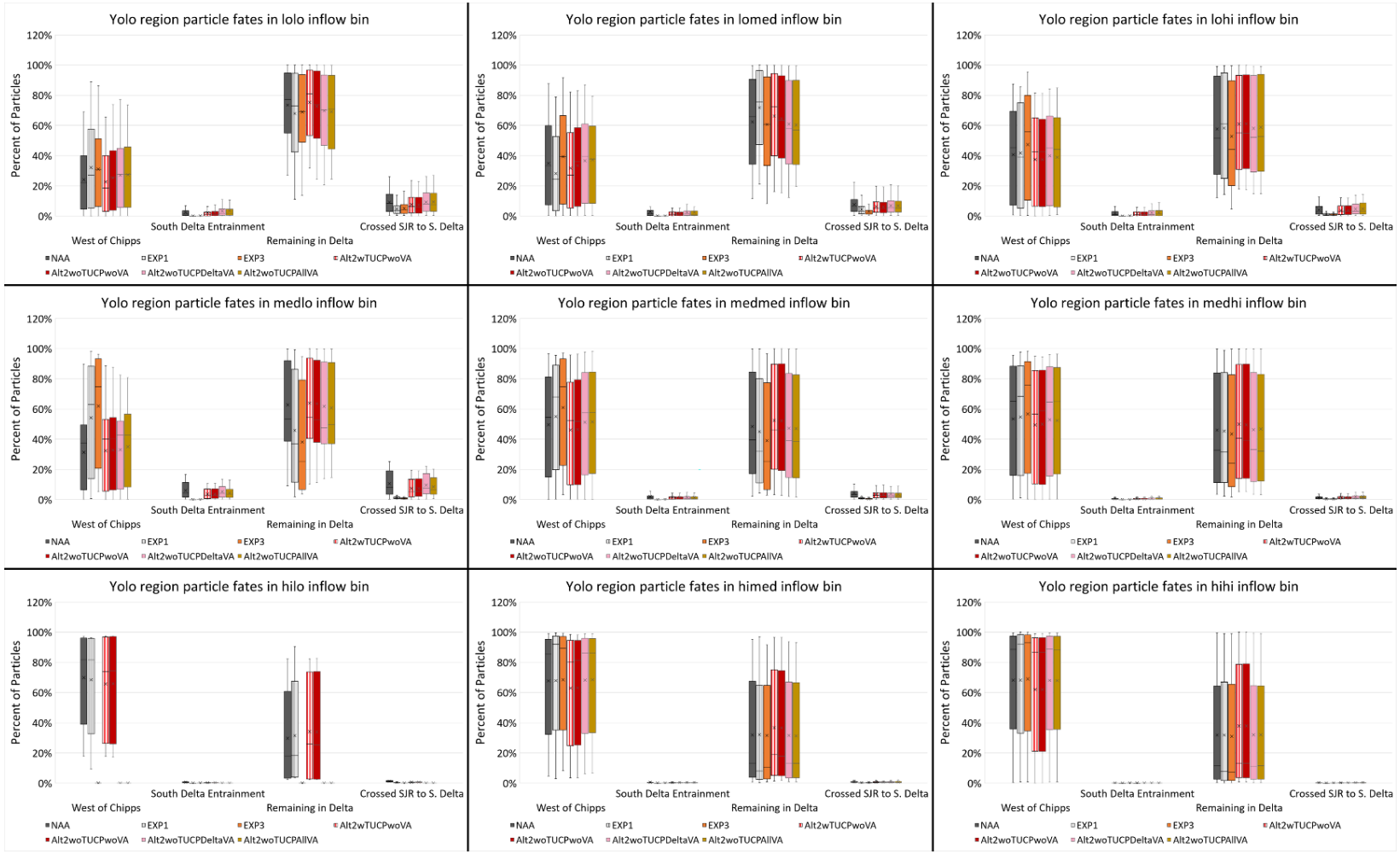

Figure I.8-10. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Yolo region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

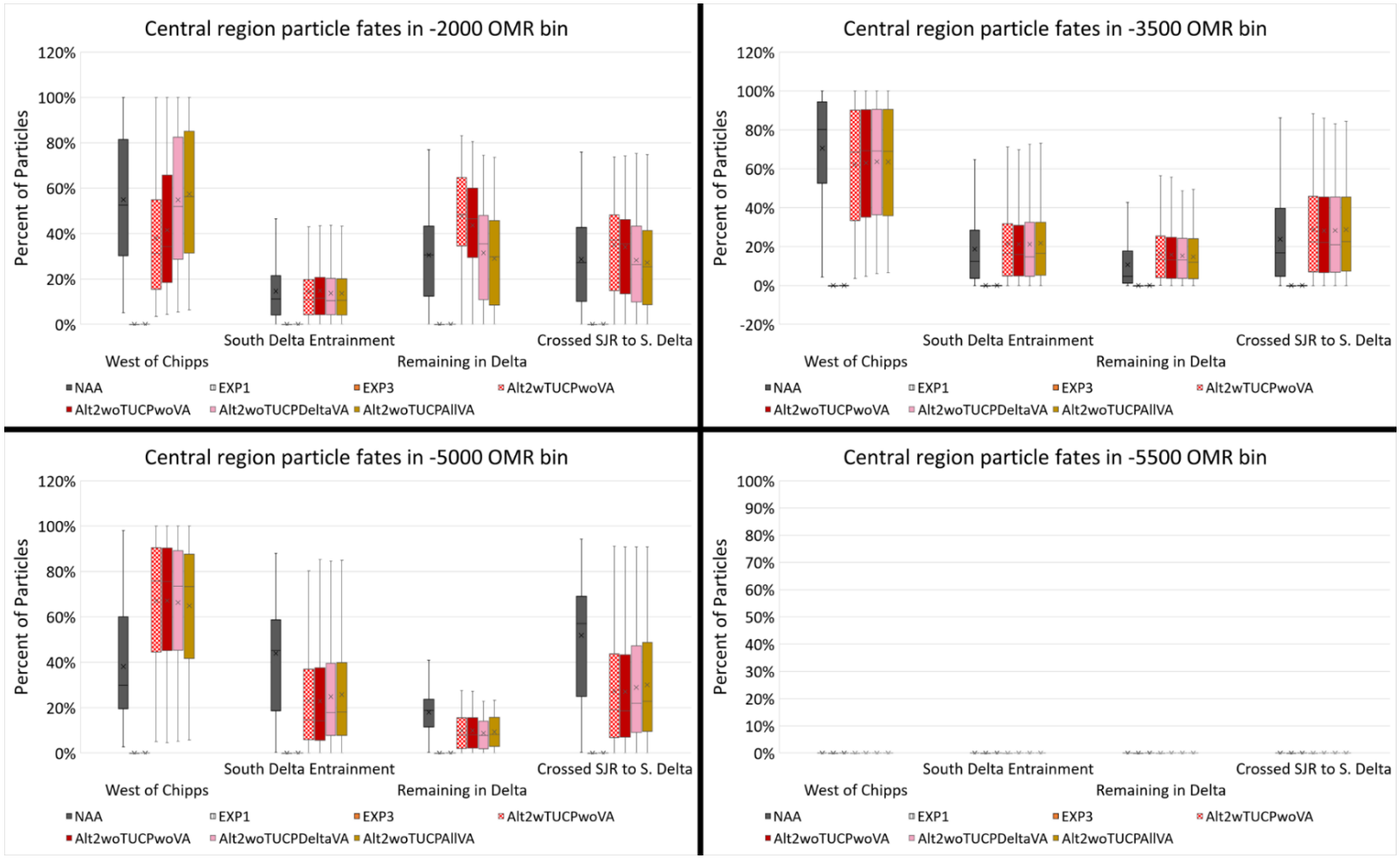

Figure I.8-11. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Central Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

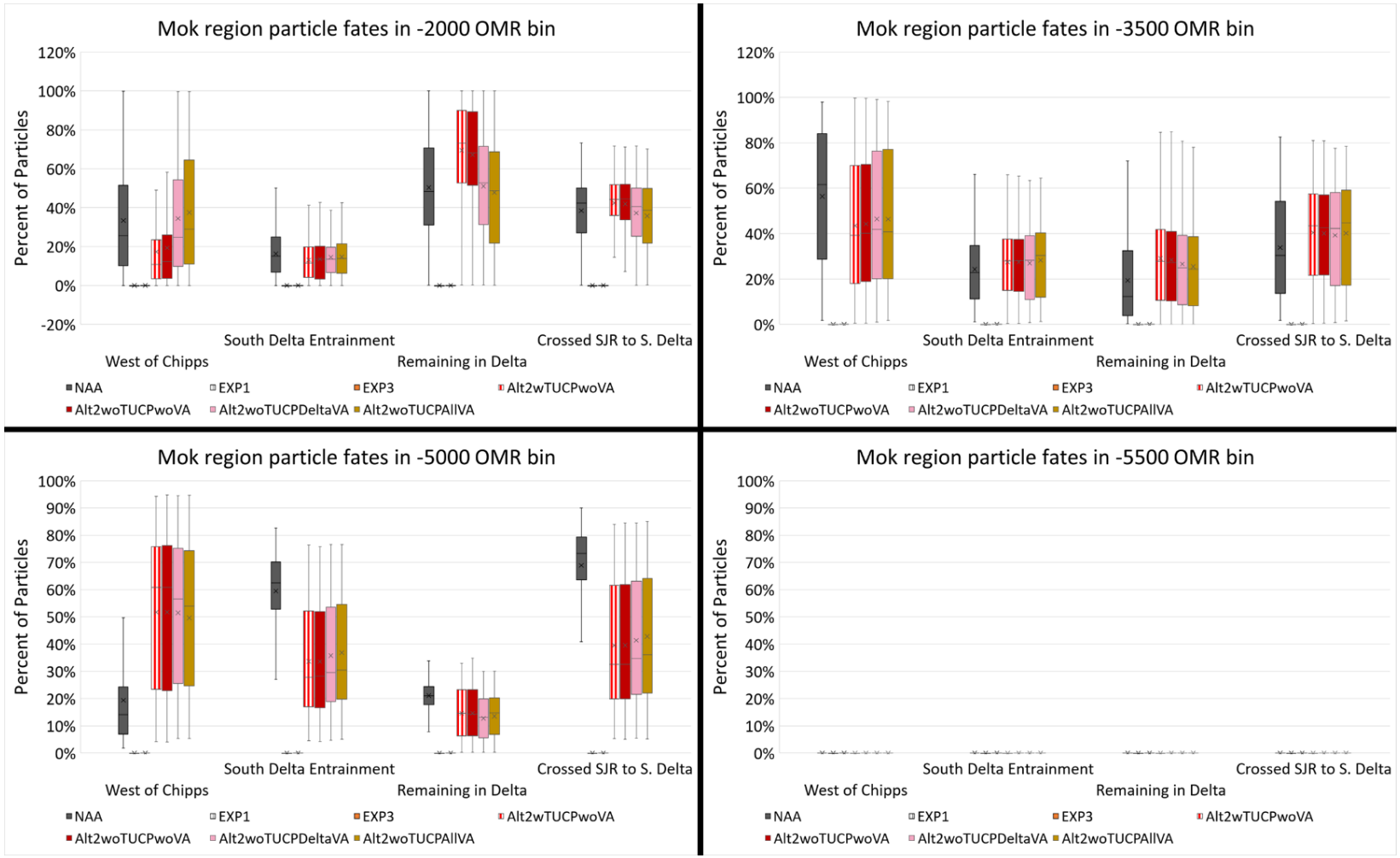

Figure I.8-12. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Mokelumne River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

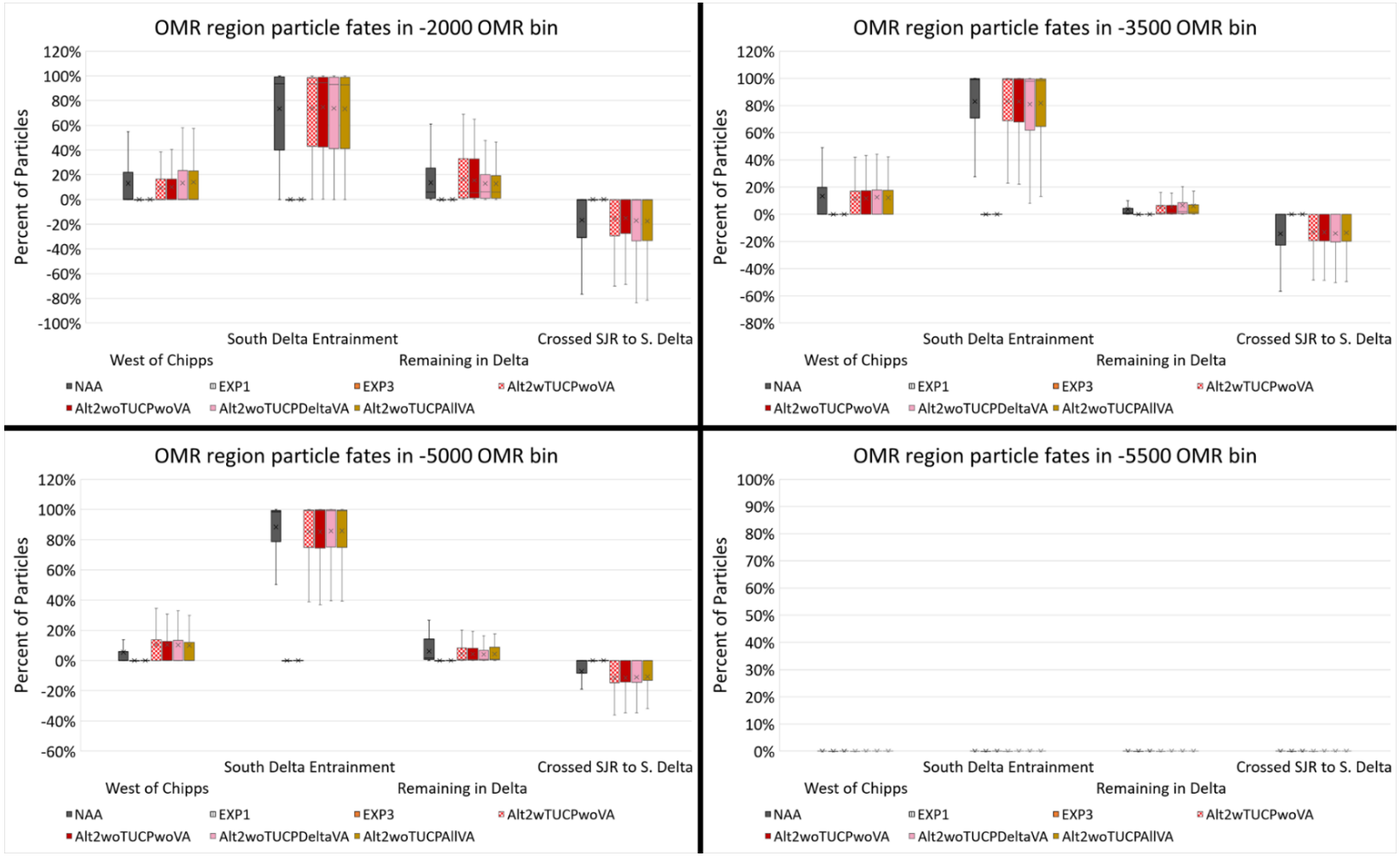

Figure I.8-13. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Old and Middle River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

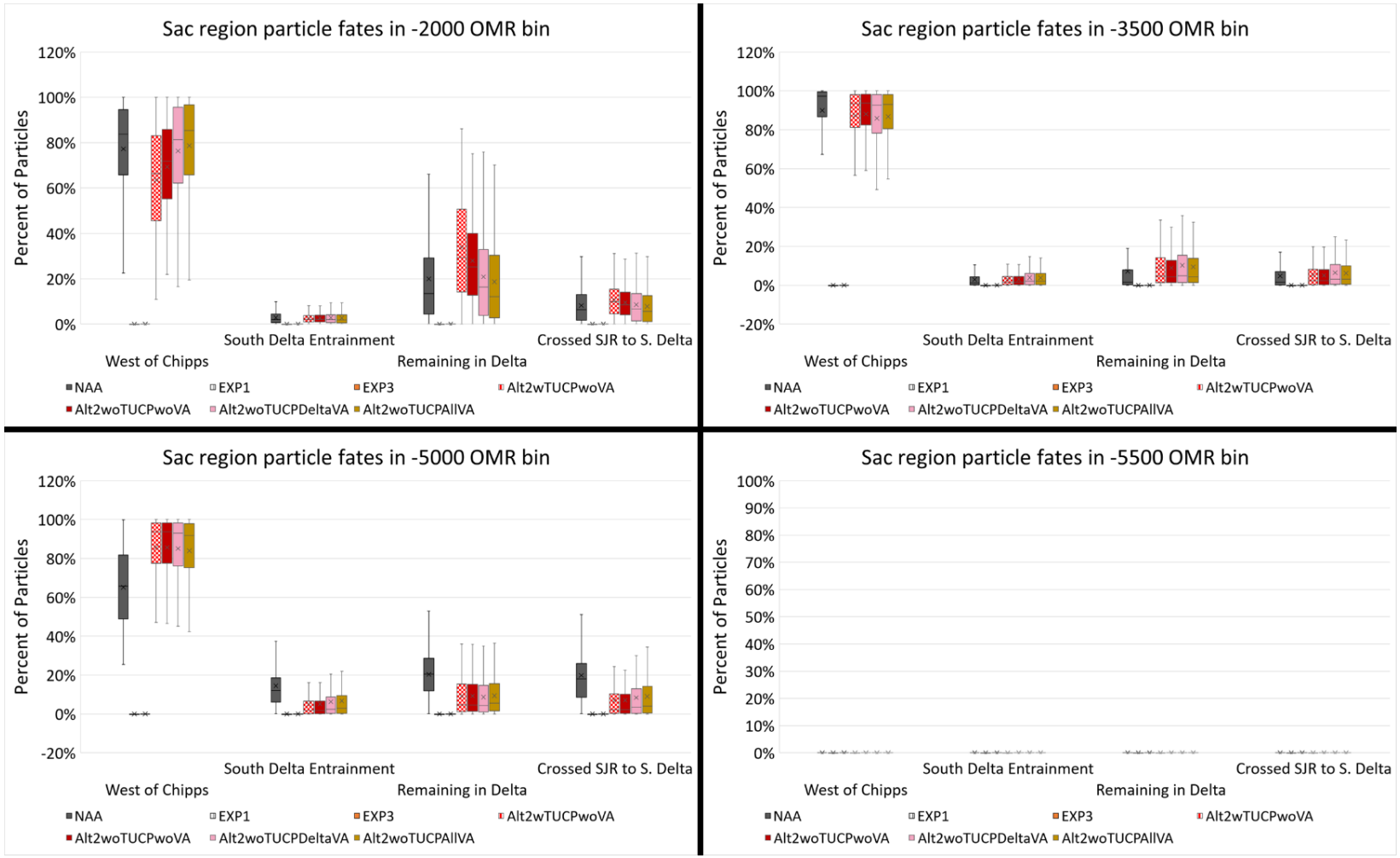

Figure I.8-14. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Sacramento River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

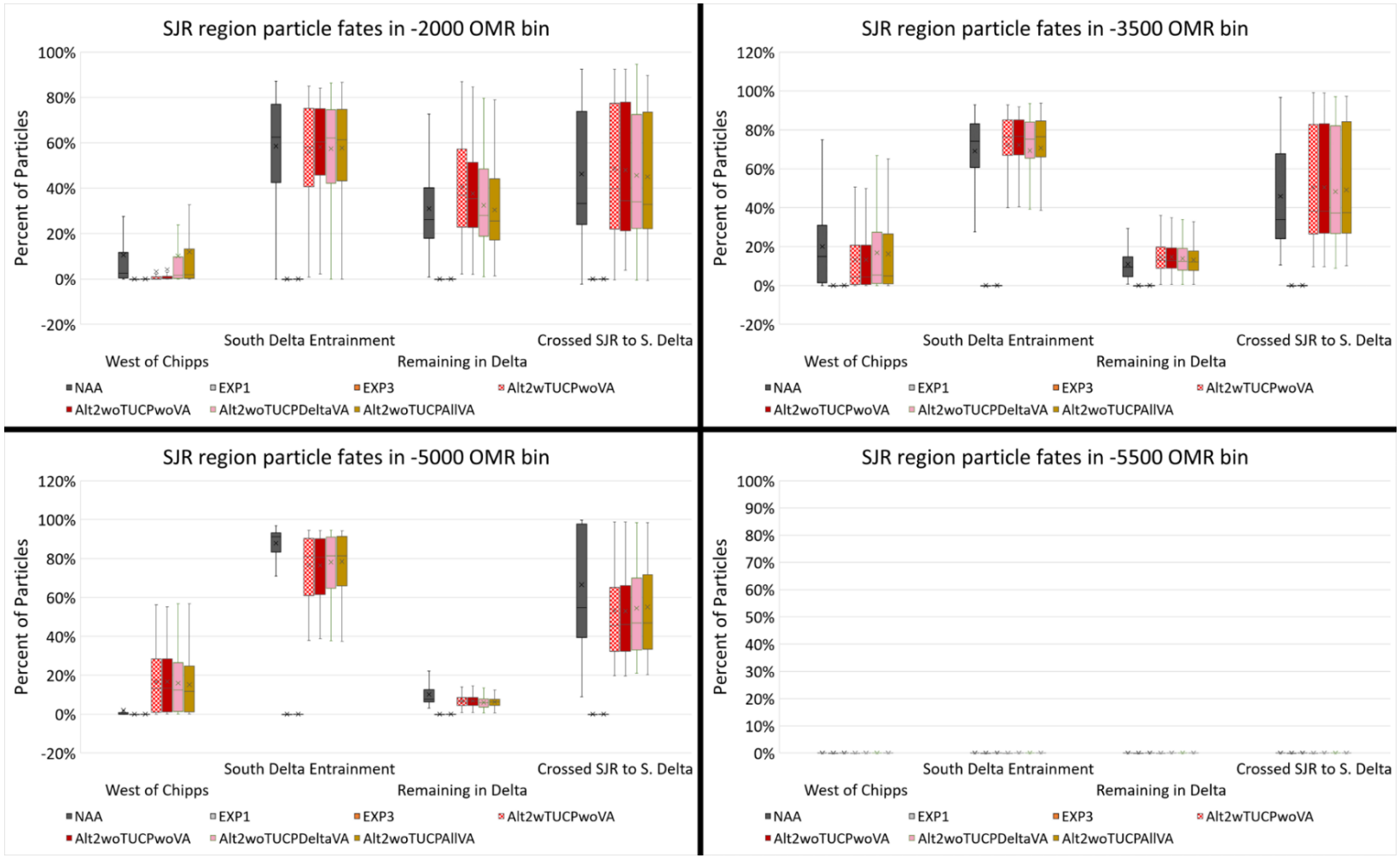

Figure I.8-15. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at San Joaquin River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

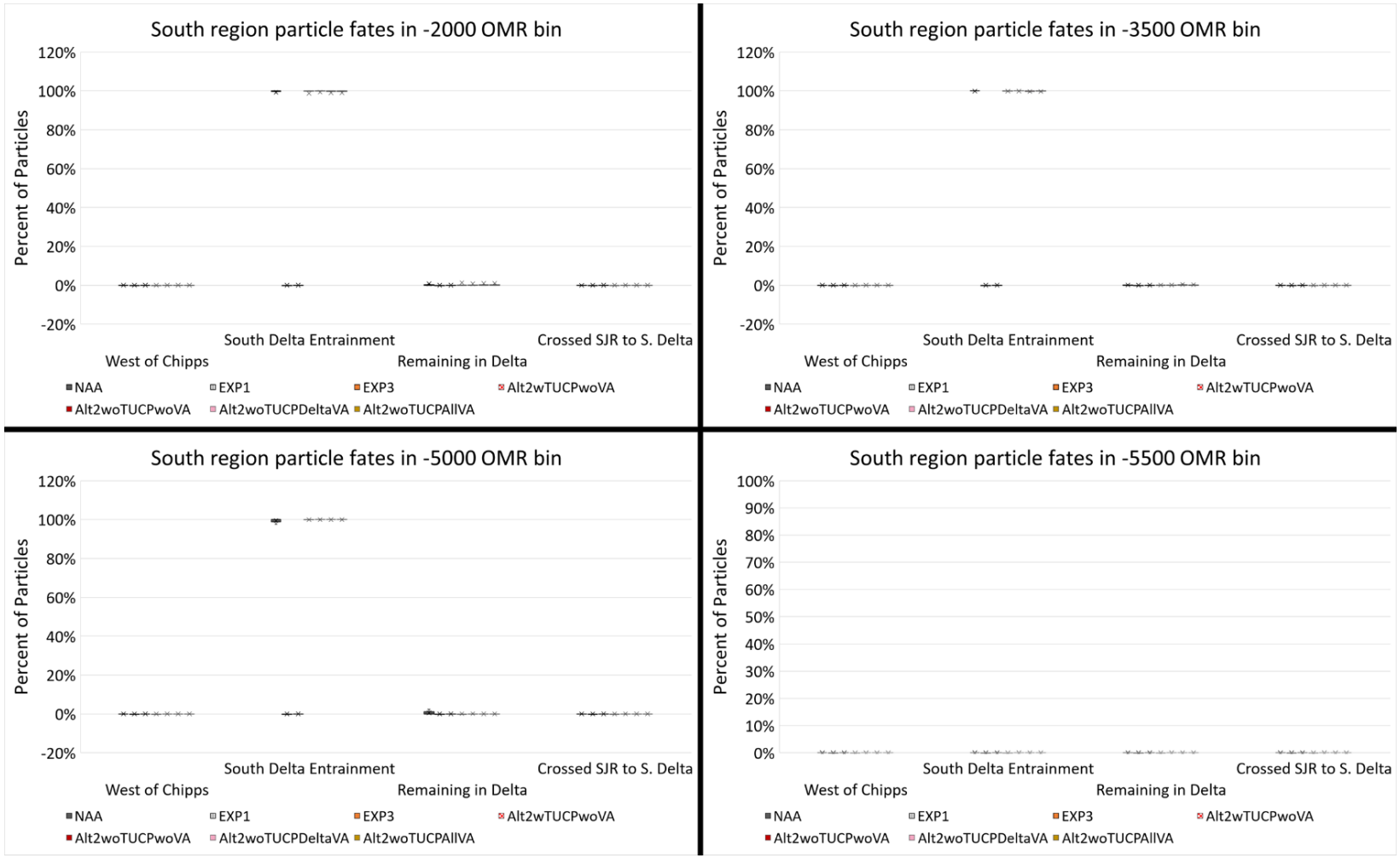

Figure I.8-16. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at South Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

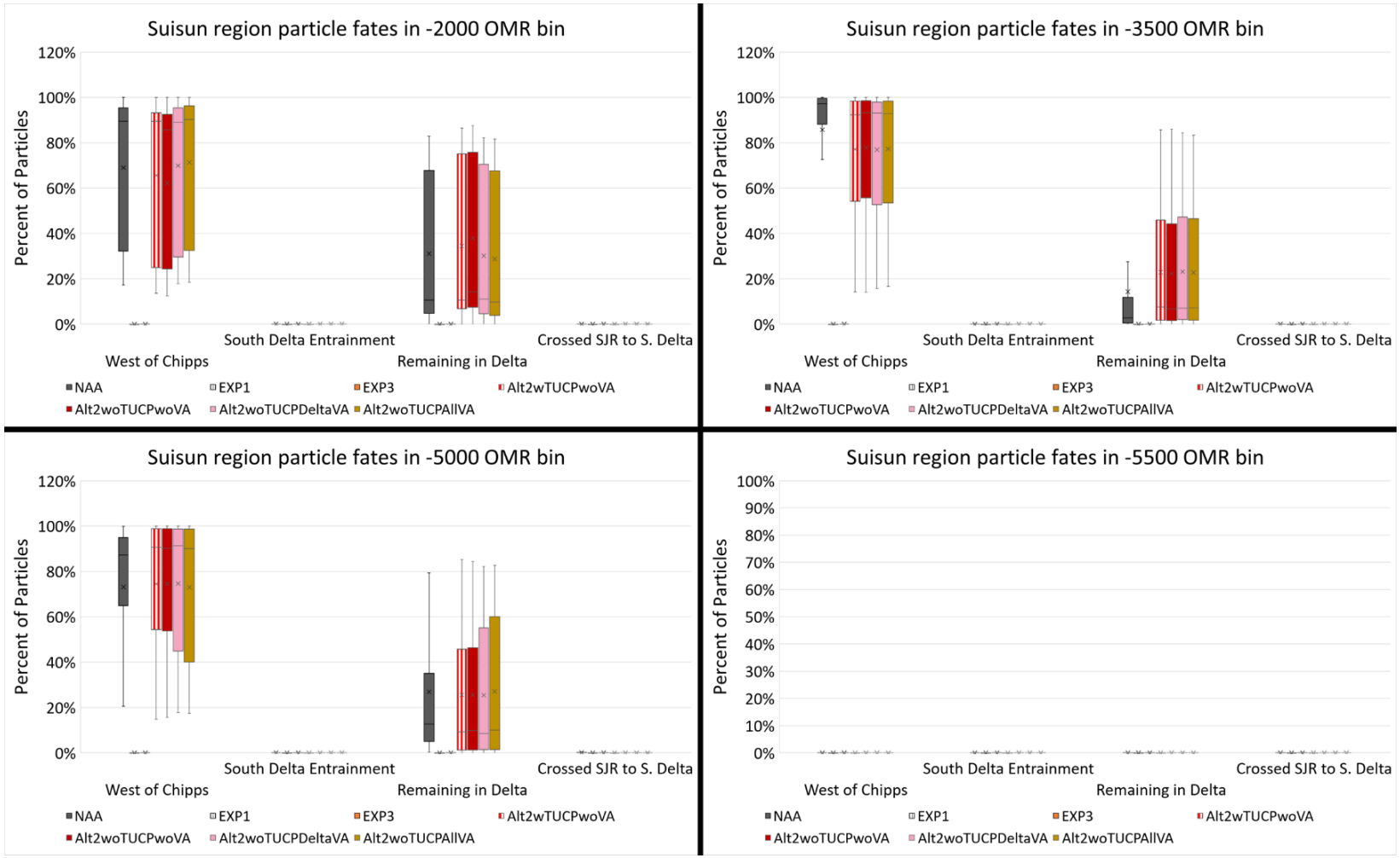

Figure I.8-17. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Suisun region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

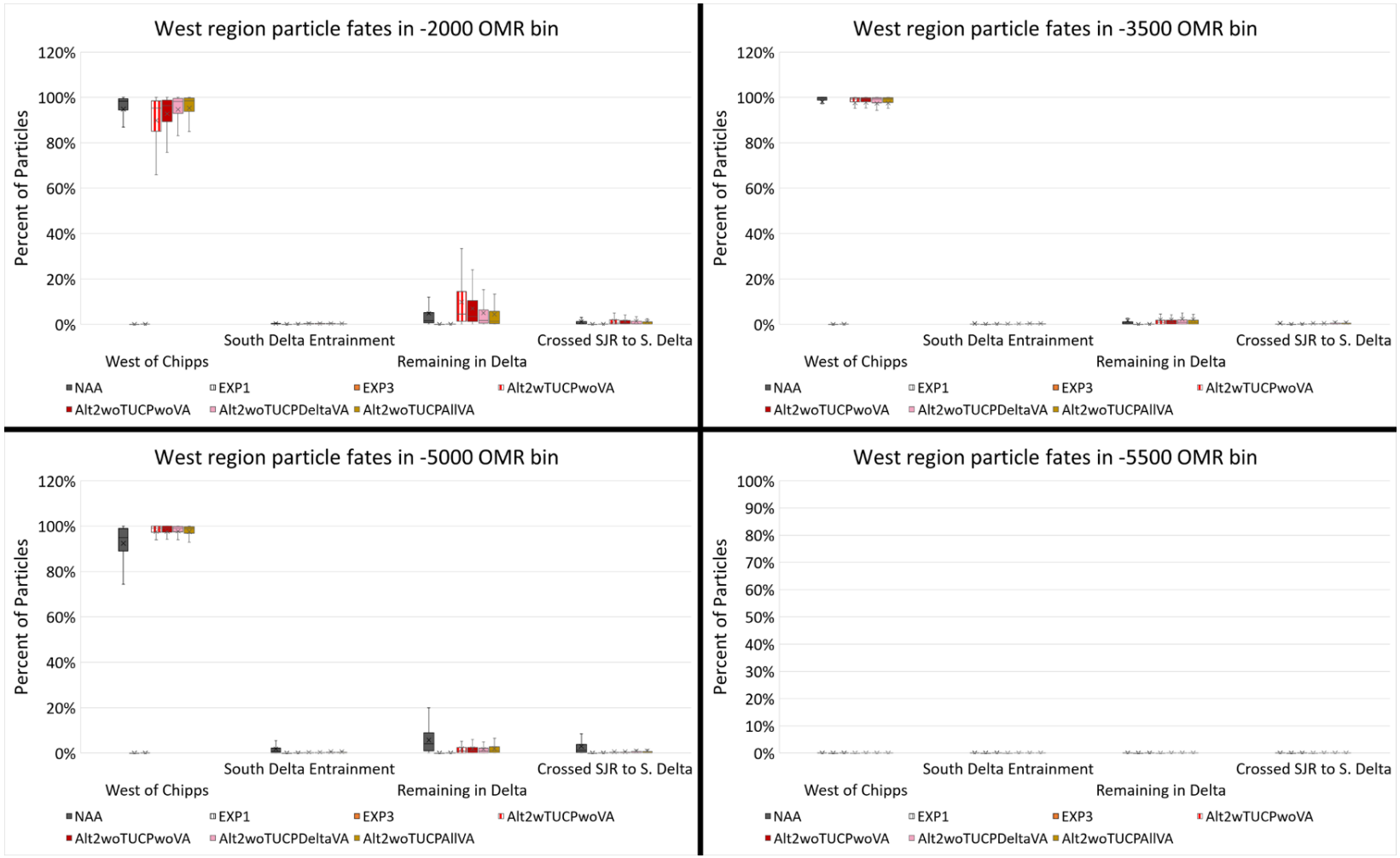

Figure I.8-18. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at West Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

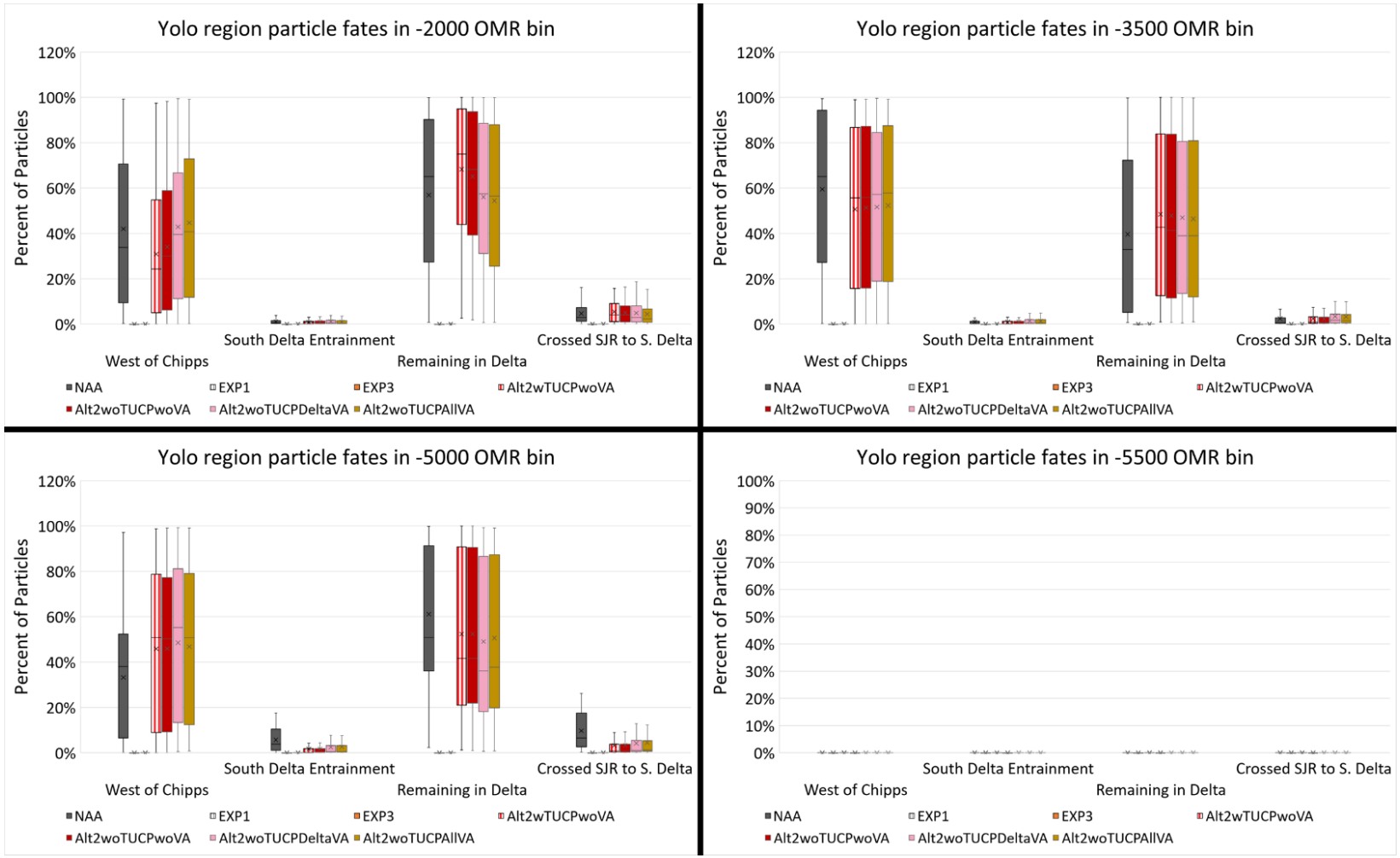

Figure I.8-19. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Yolo region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

I.8.4.4.2 Surface Oriented, Inflow and OMR Bins [BA, Figure I.8-20 through Figure I.8-37]

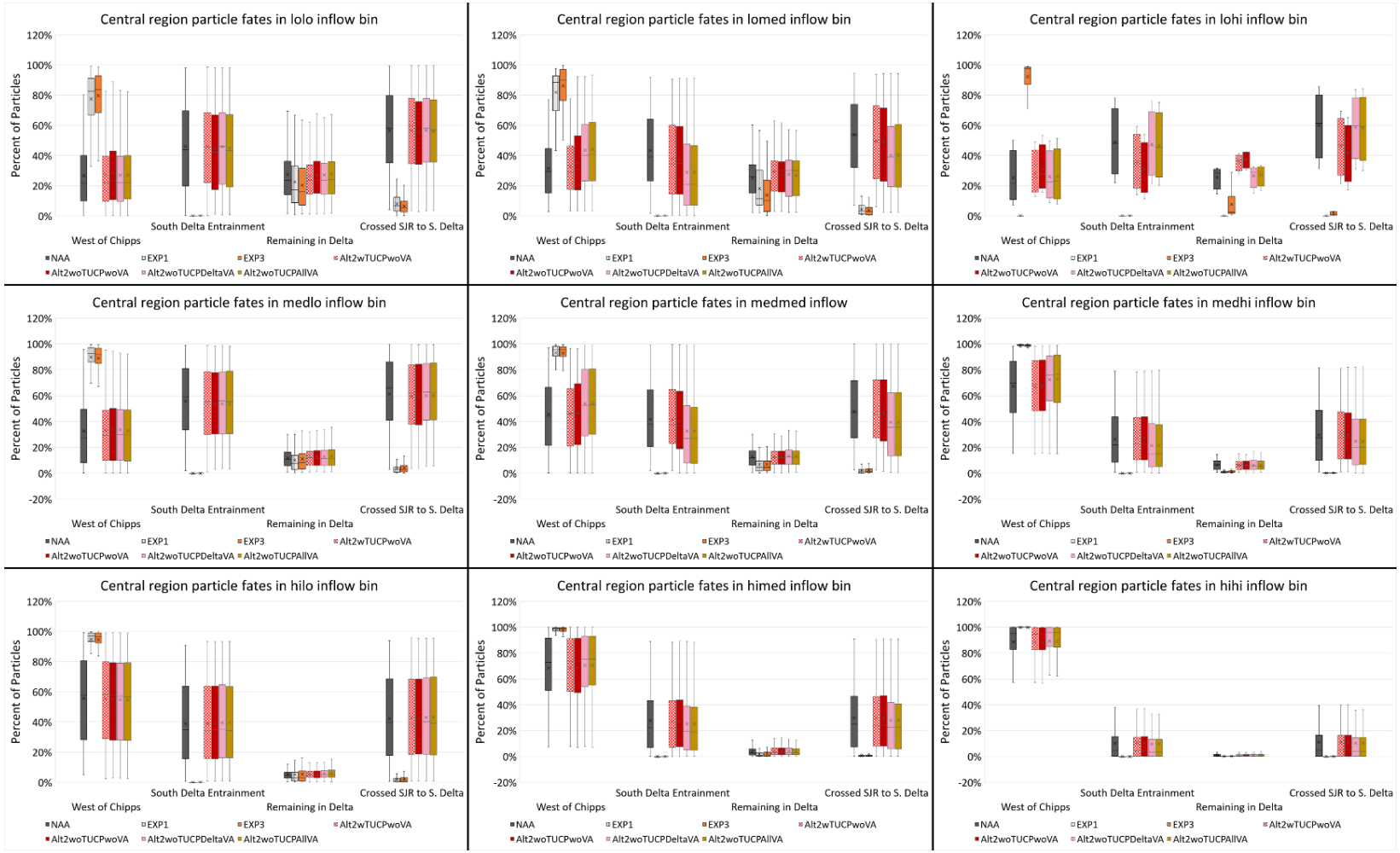

Figure I.8-20. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Central Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

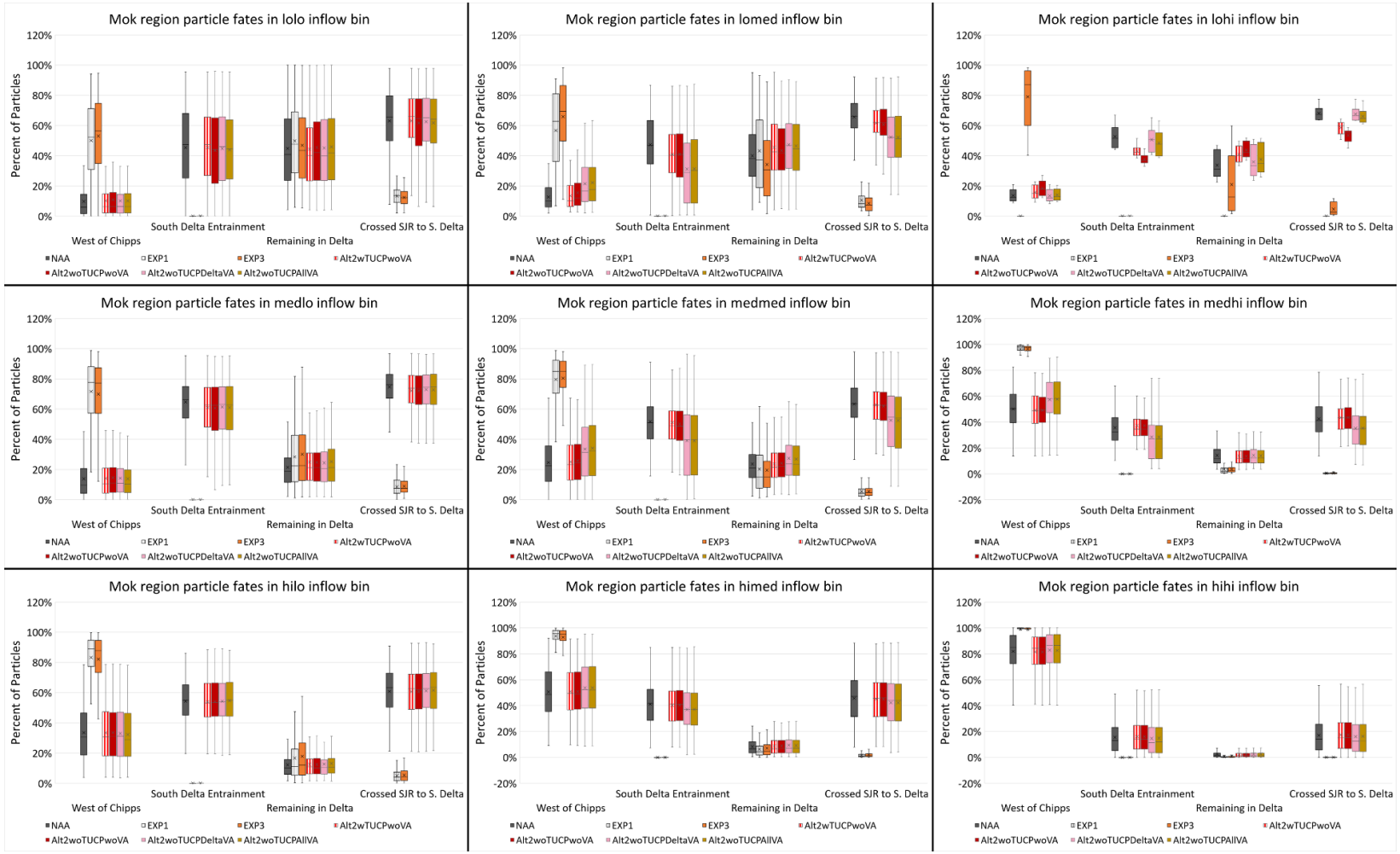

Figure I.8-21. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Mokelumne River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

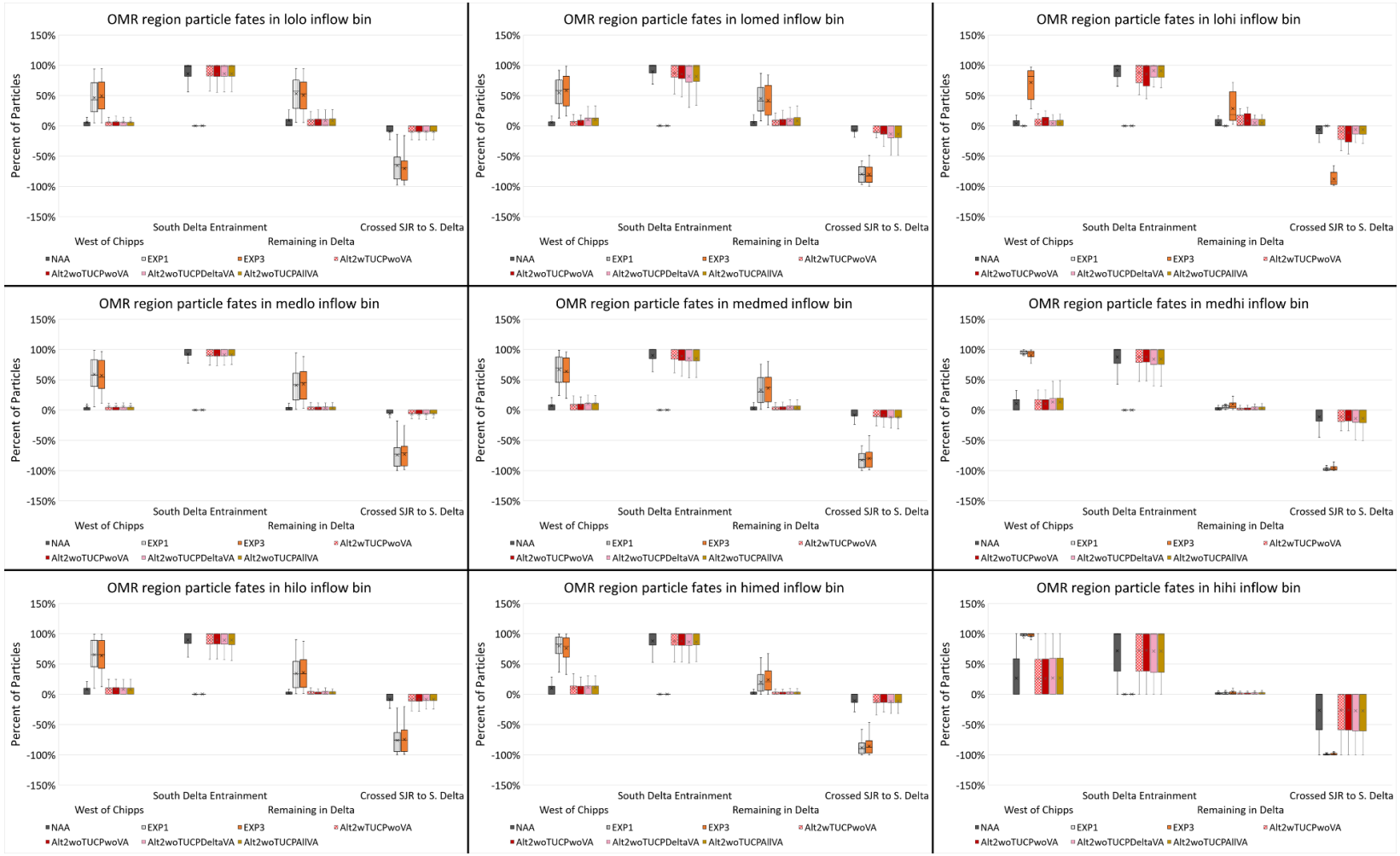

Figure I.8-22. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Old and Middle River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

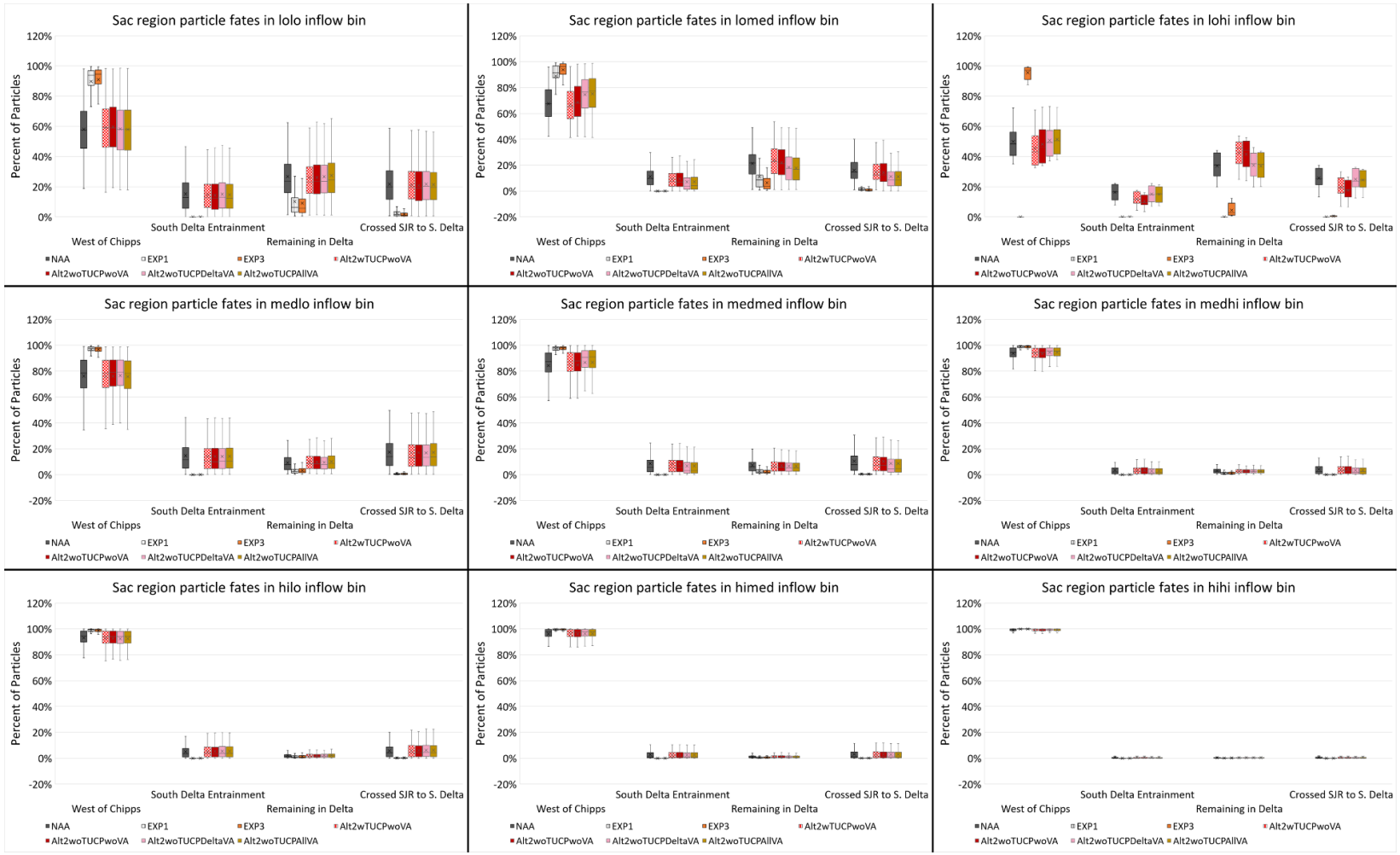

Figure I.8-23. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Sacramento River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

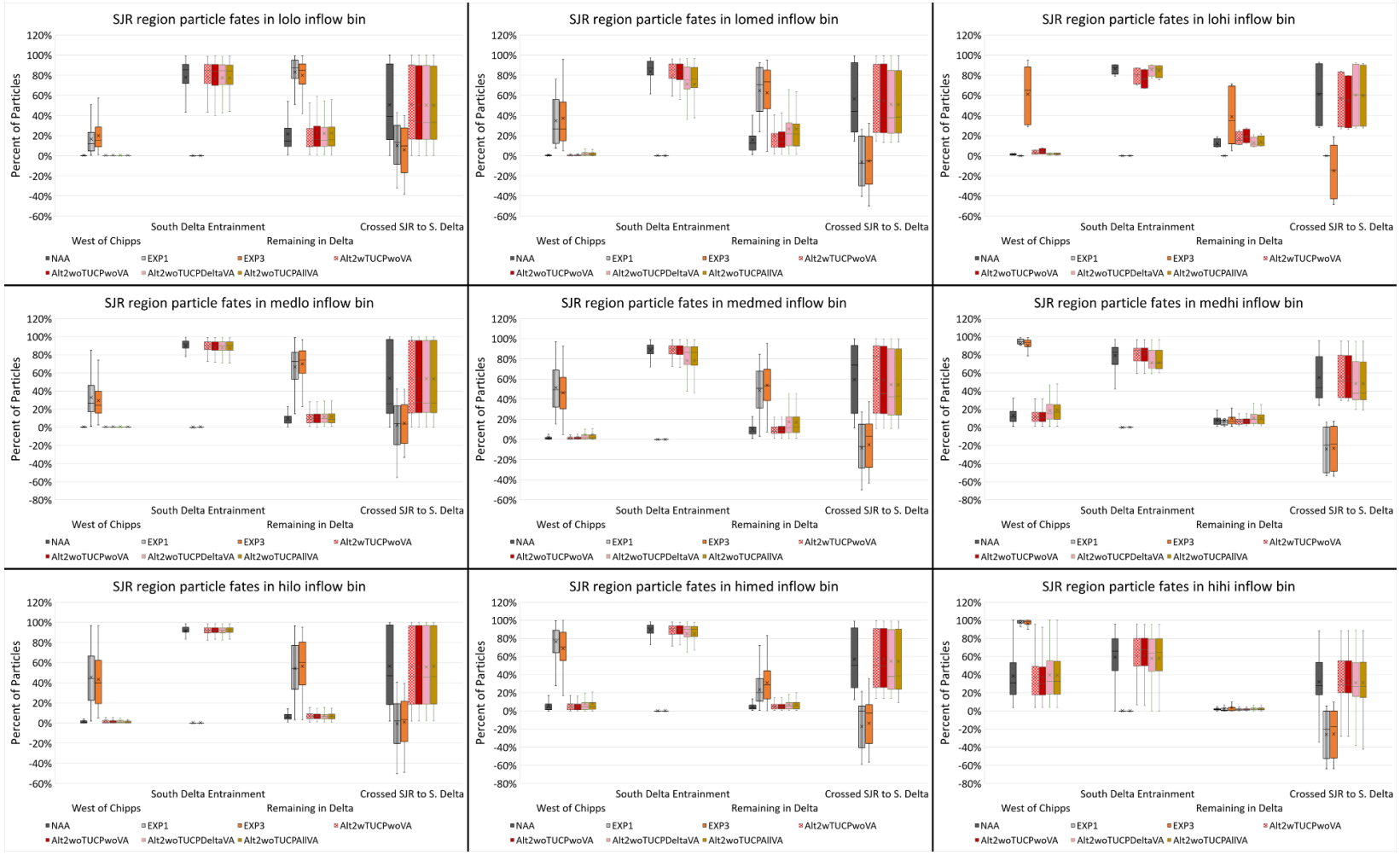

Figure I.8-24. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at San Joaquin River region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

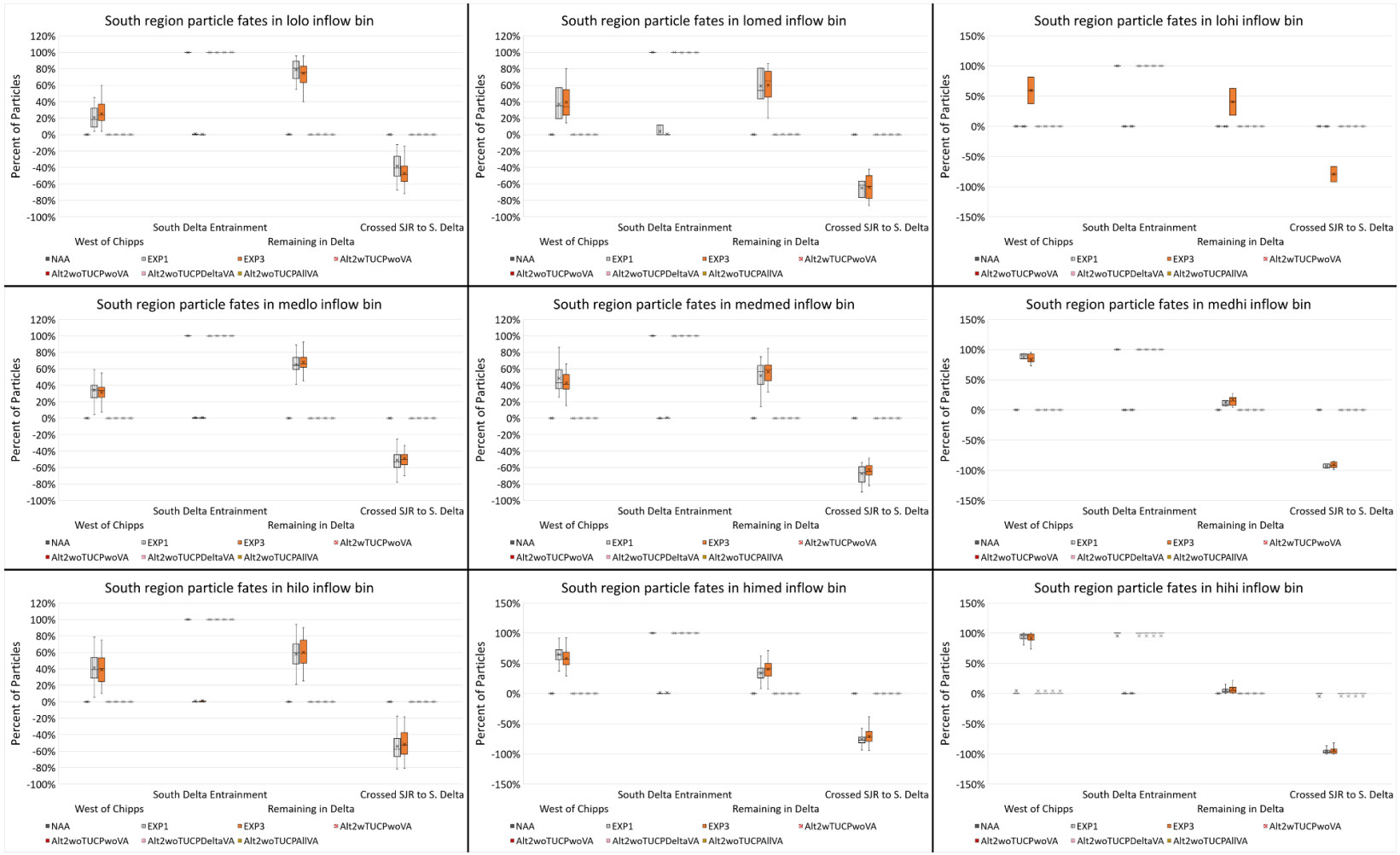

Figure I.8-25. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at South Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

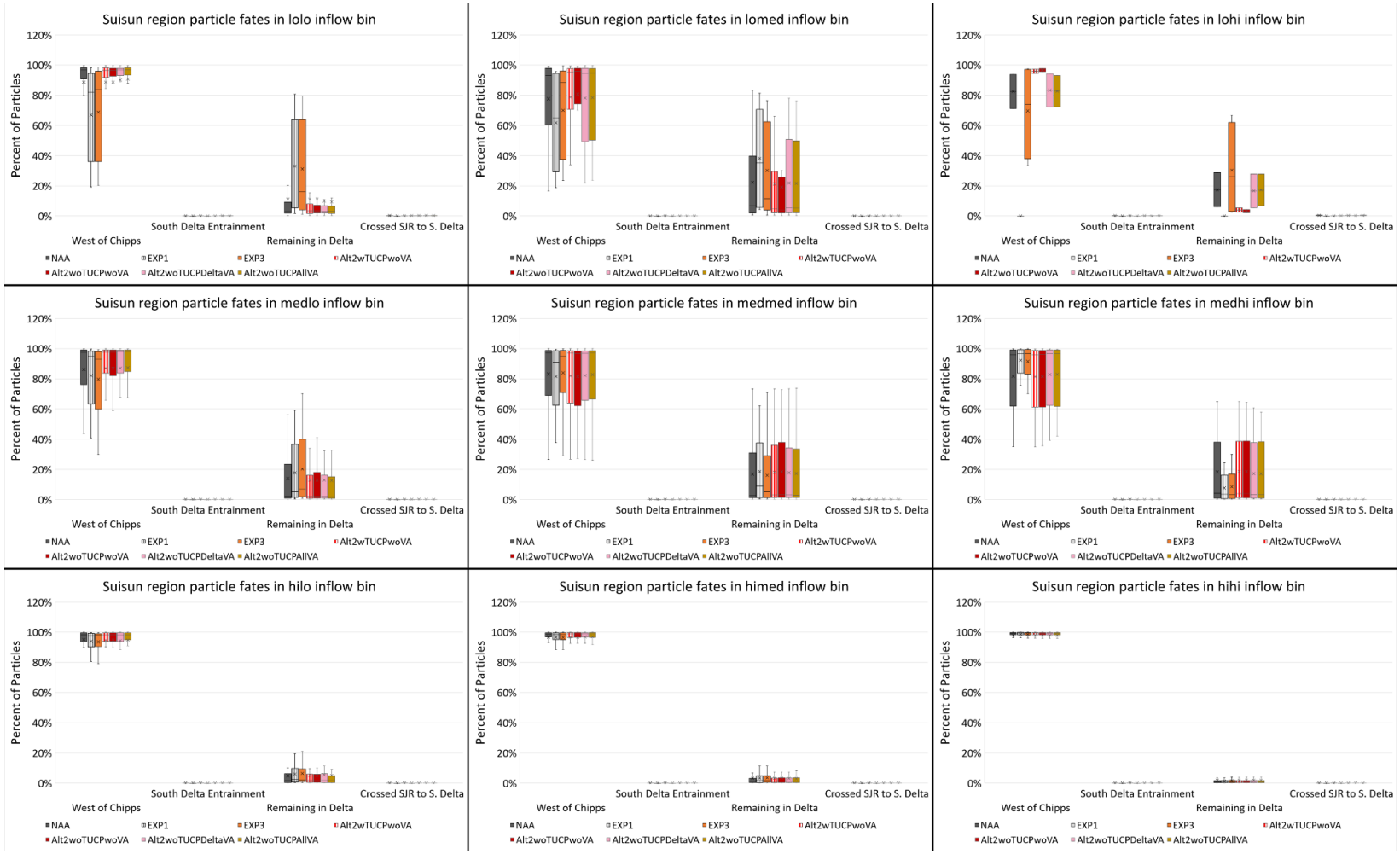

Figure I.8-26. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Suisun region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

Figure I.8-27. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at West Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

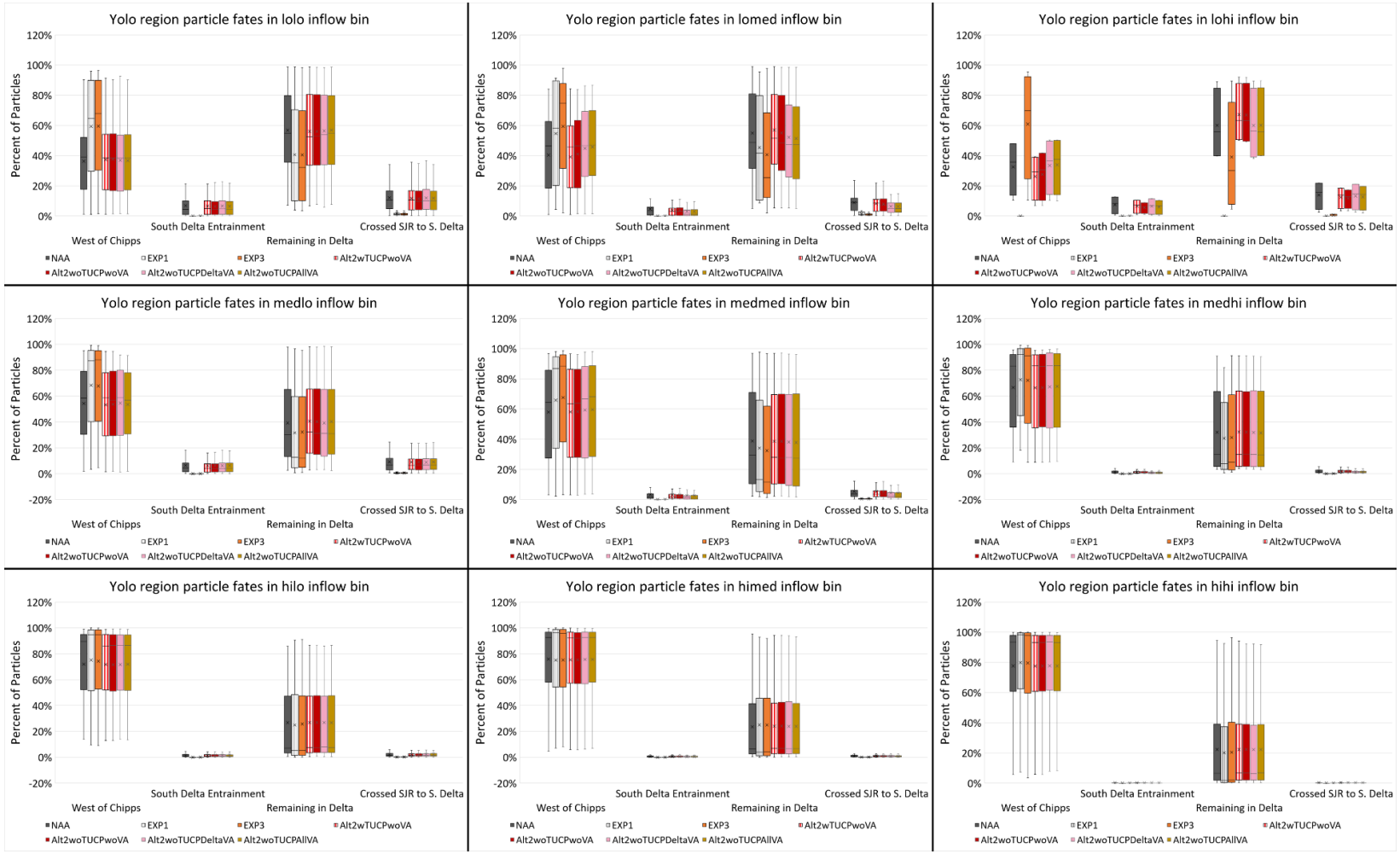

Figure I.8-28. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Yolo region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

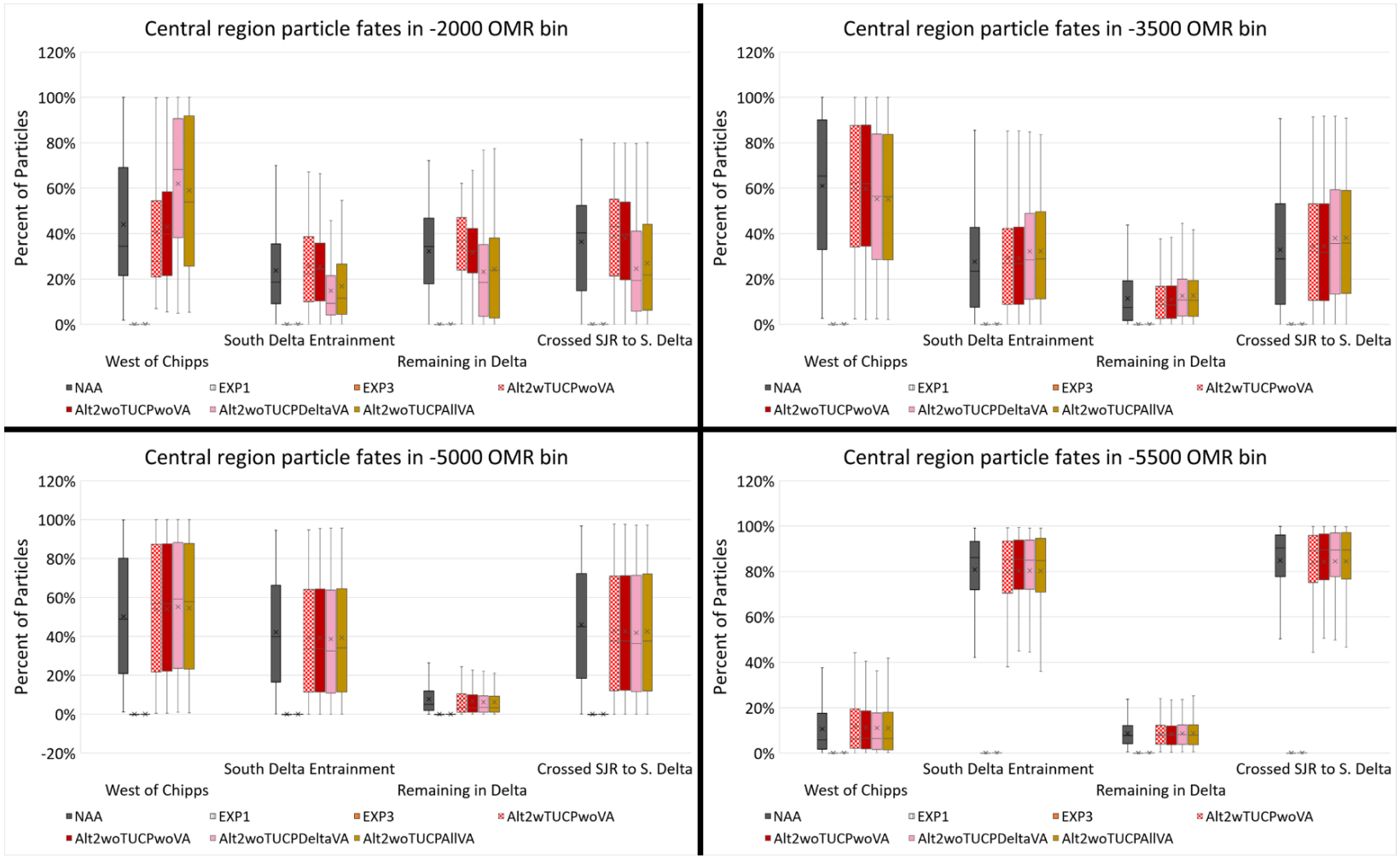

Figure I.8-29. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Central Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

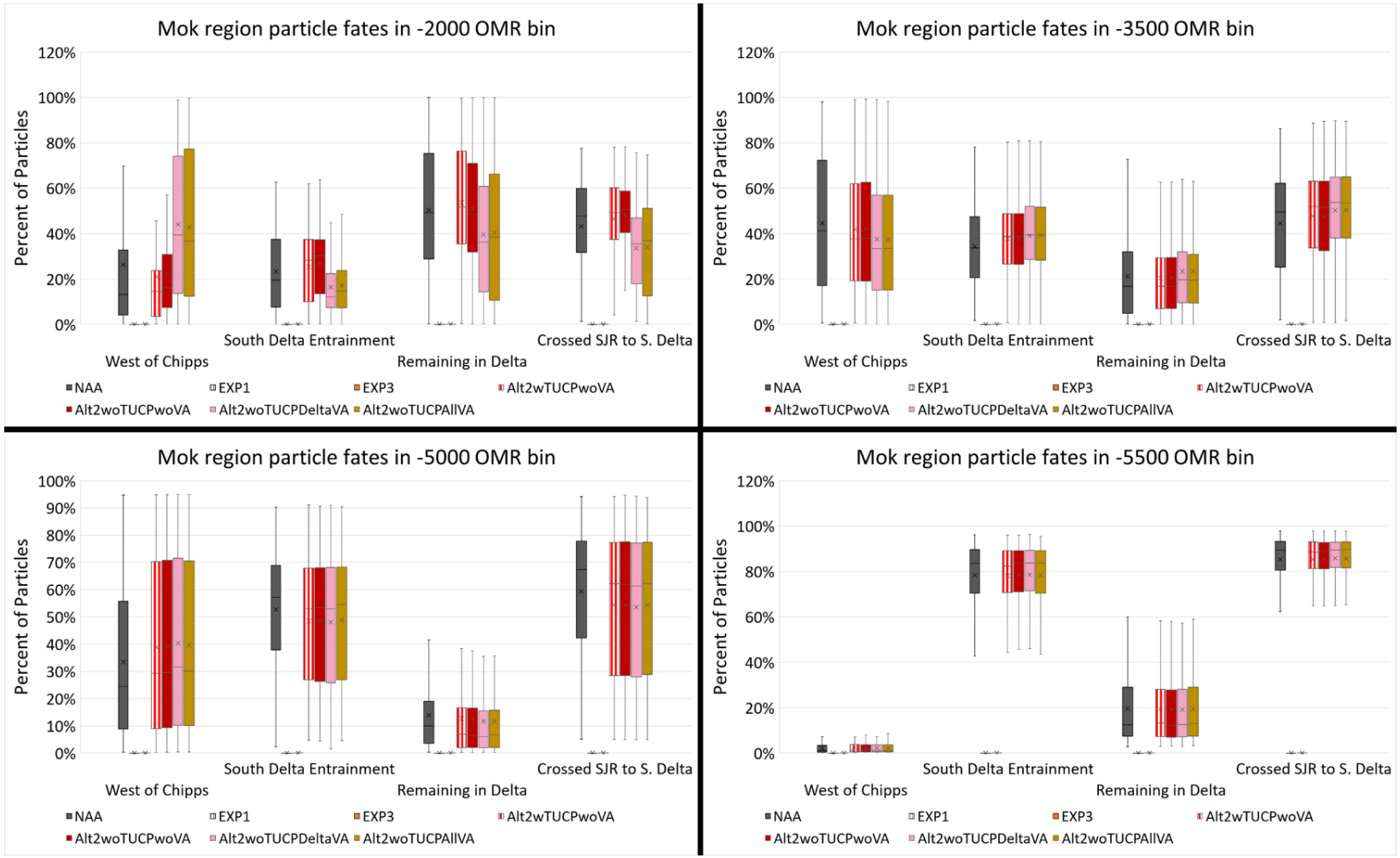

Figure I.8-30. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Mokelumne River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

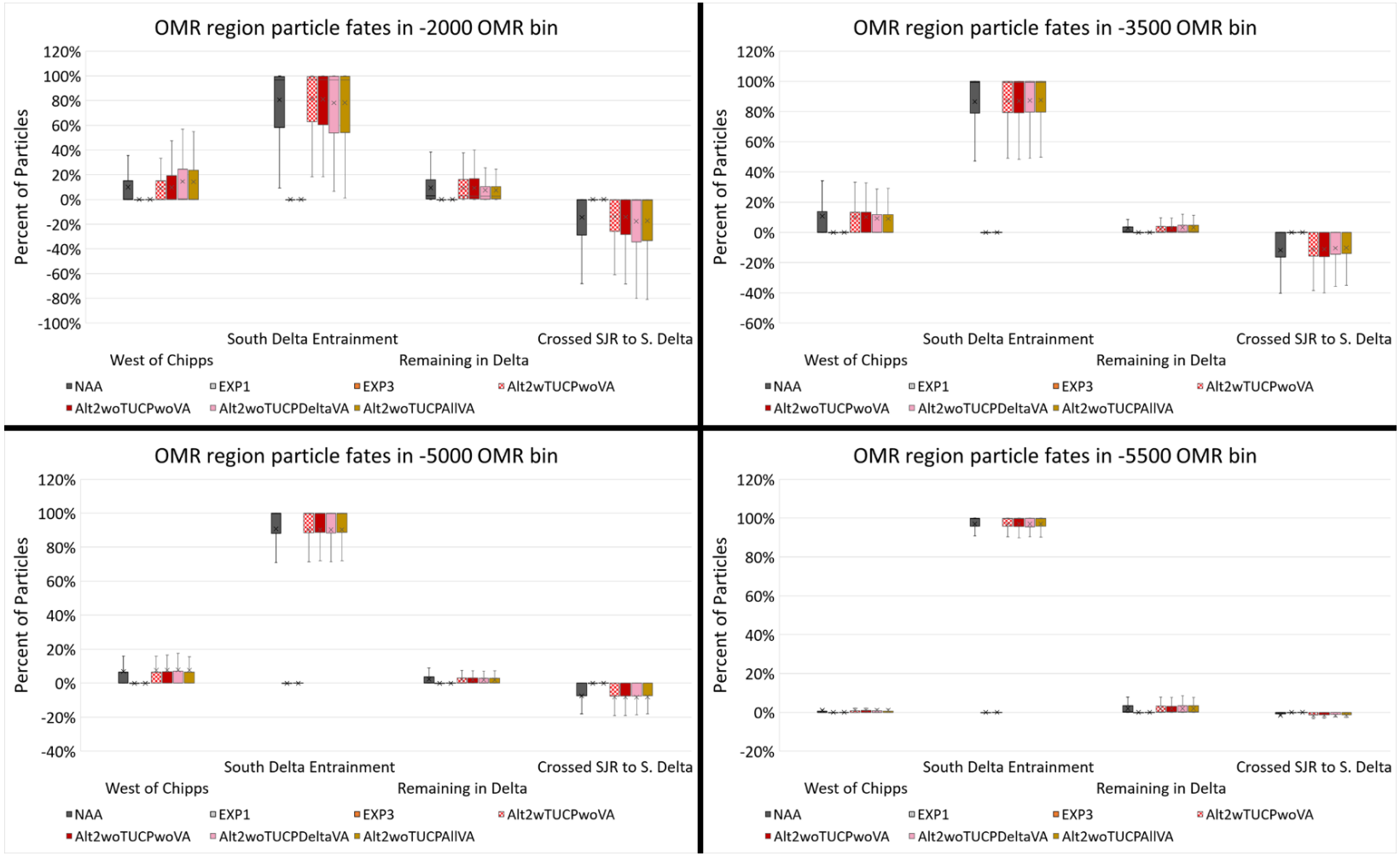

Figure I.8-31. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Old and Middle River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

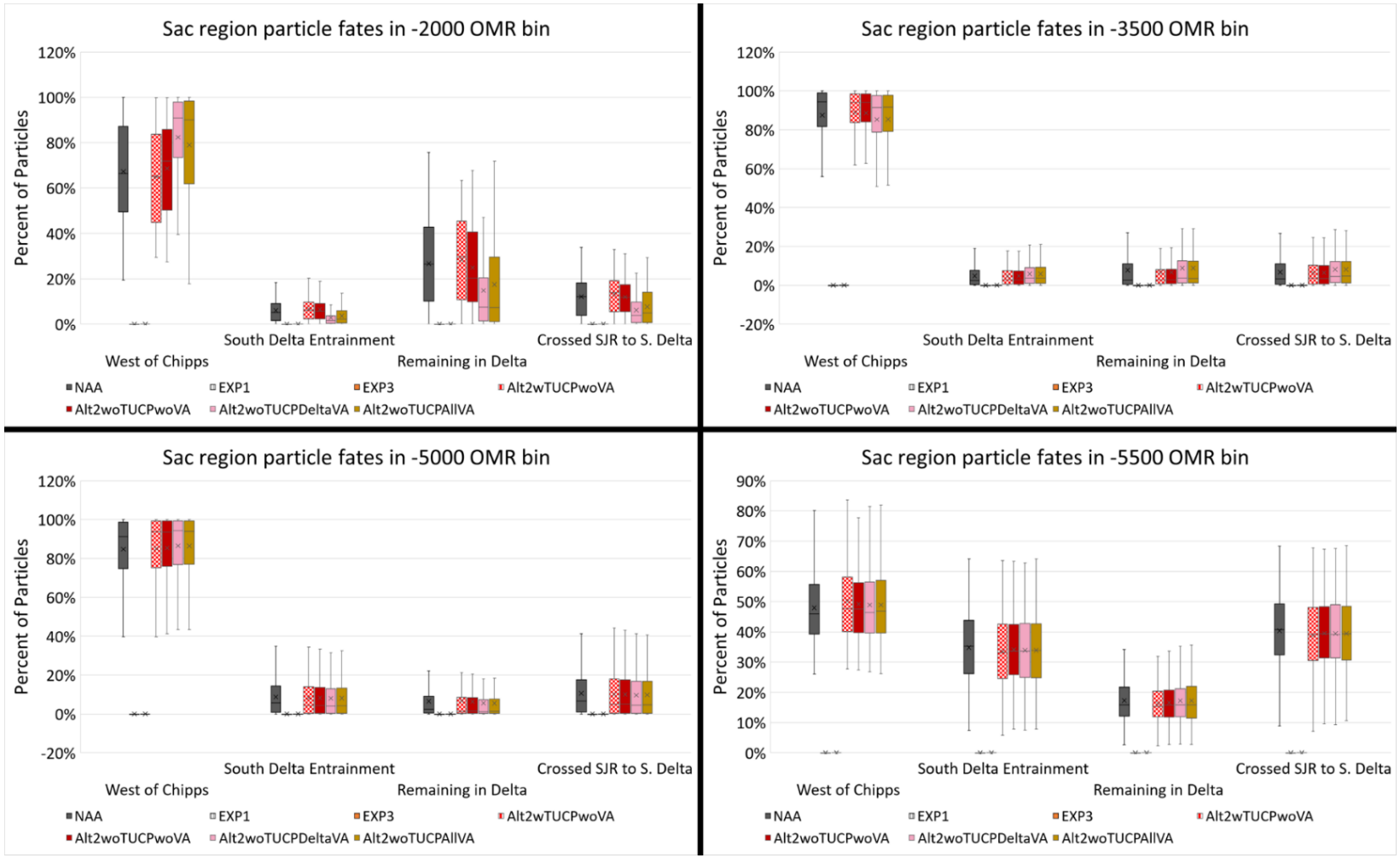

Figure I.8-32. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Sacramento River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

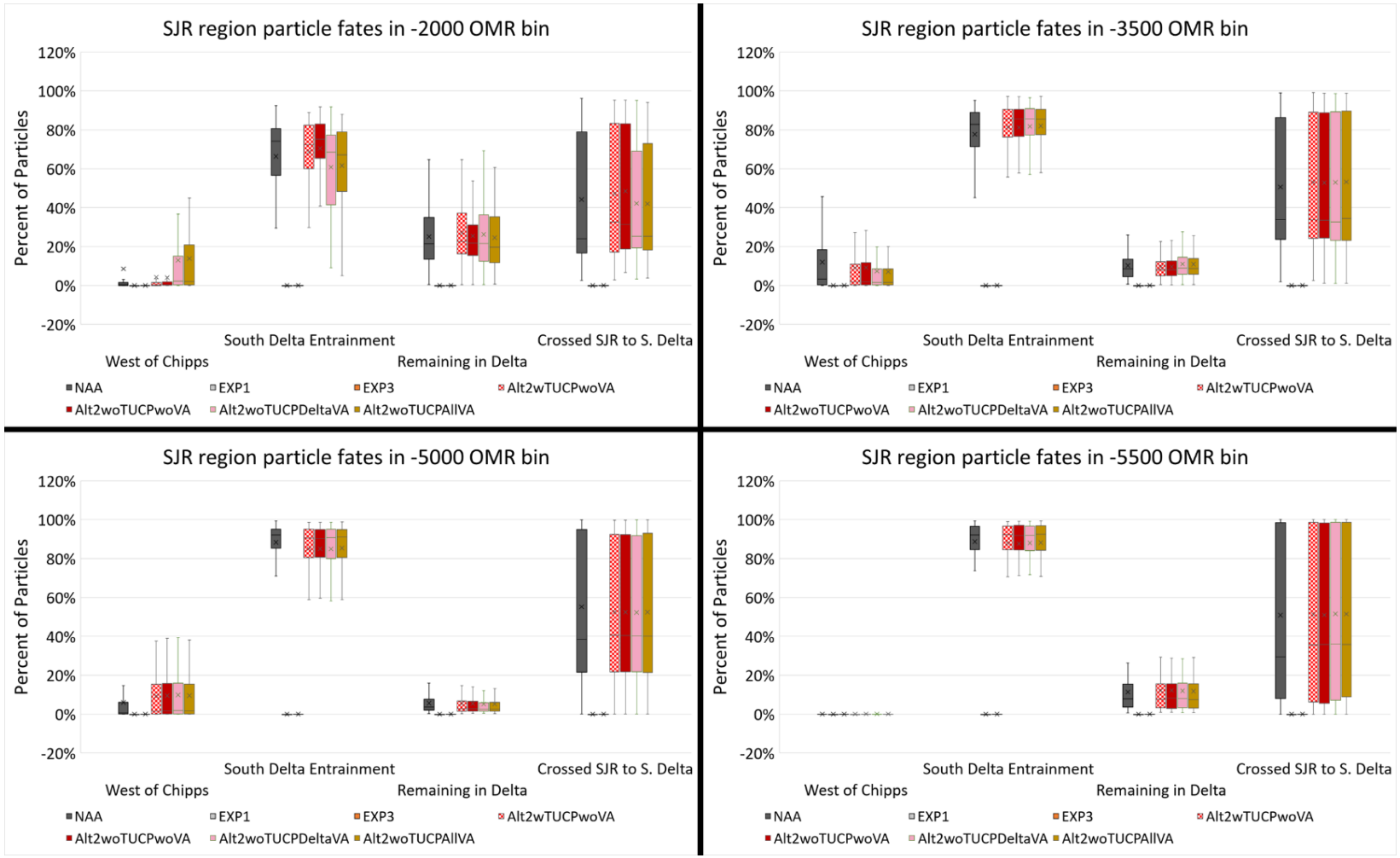

Figure I.8-33. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at San Joaquin River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

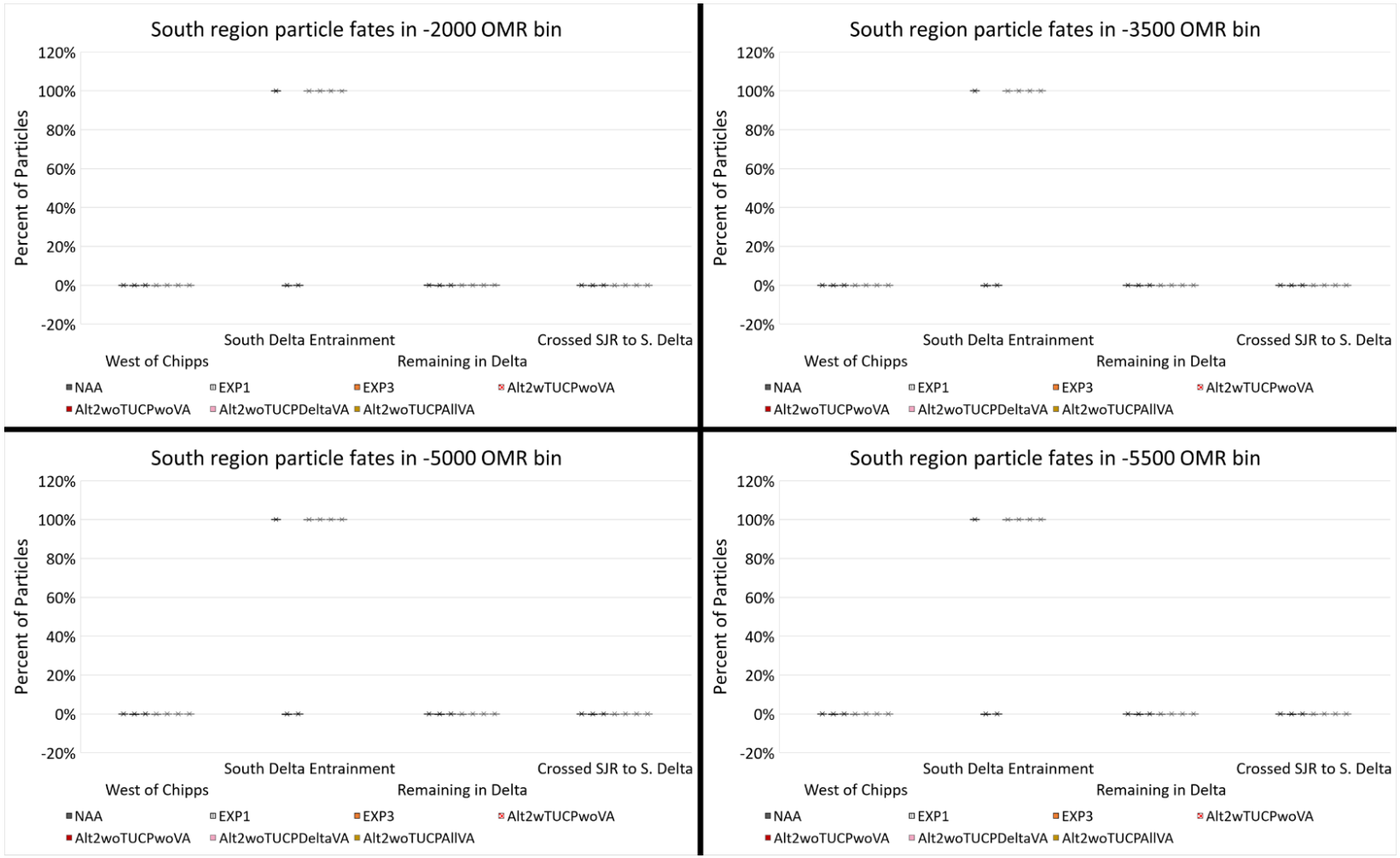

Figure I.8-34. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at South Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

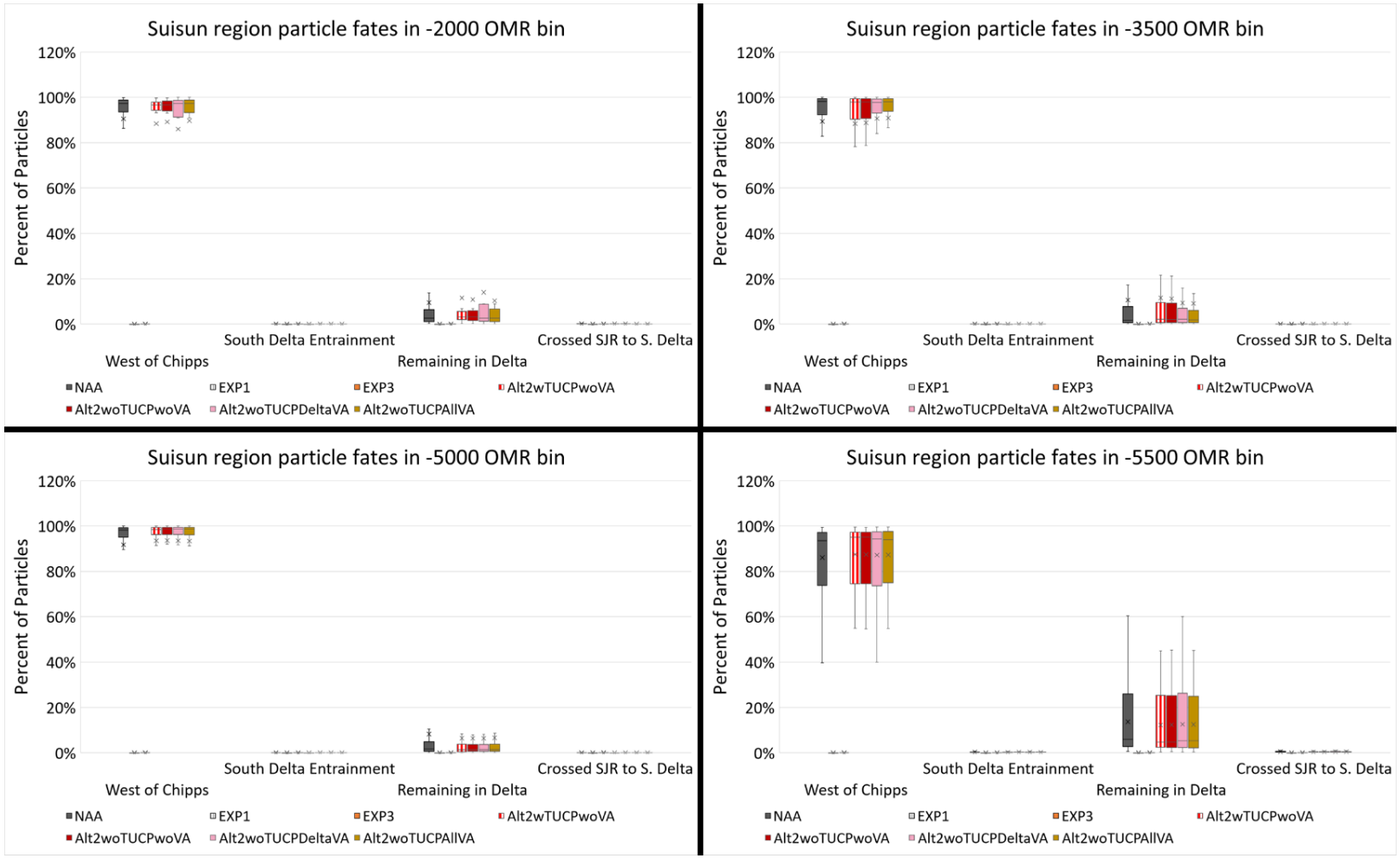

Figure I.8-35. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Suisun region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

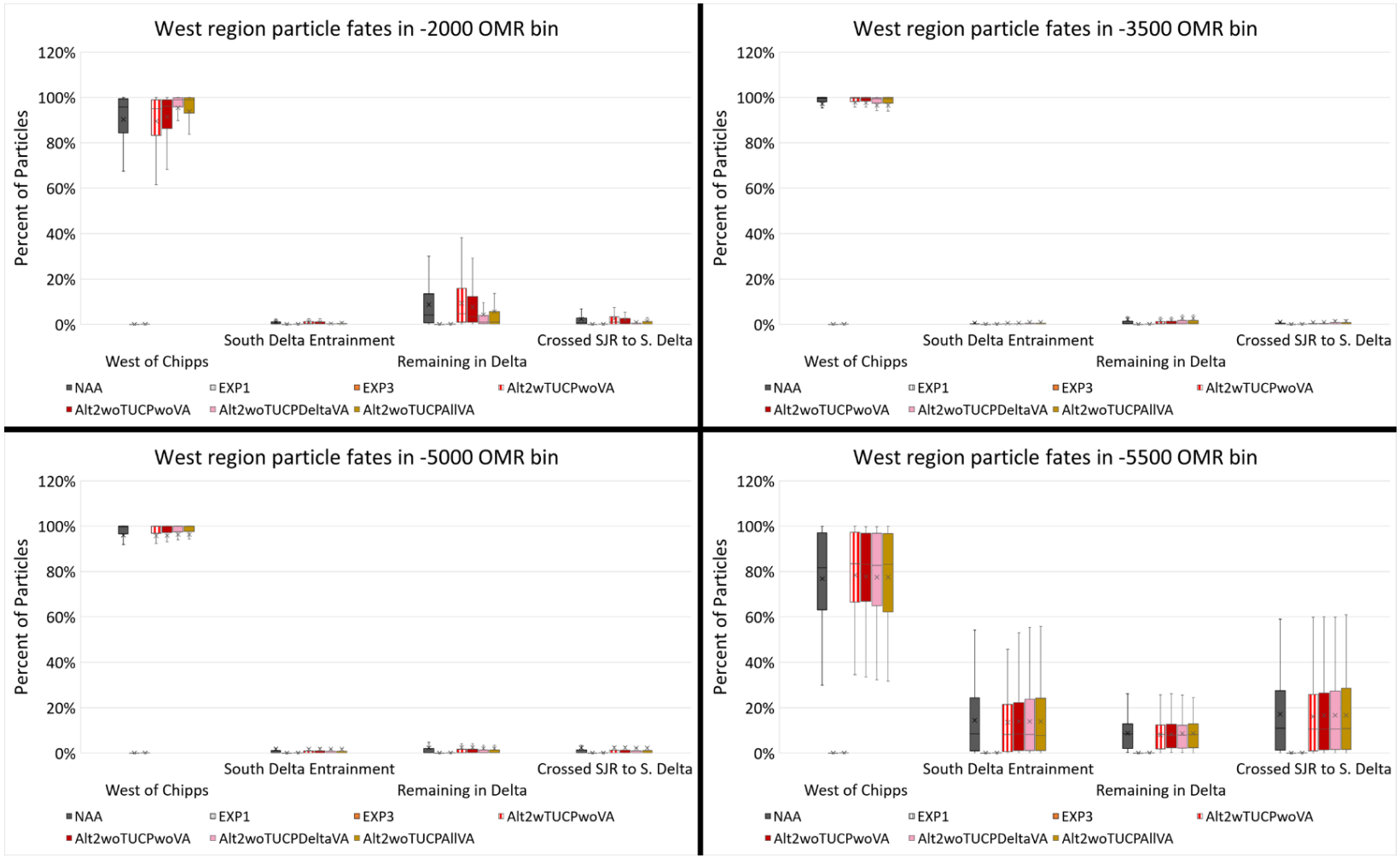

Figure I.8-36. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at West Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

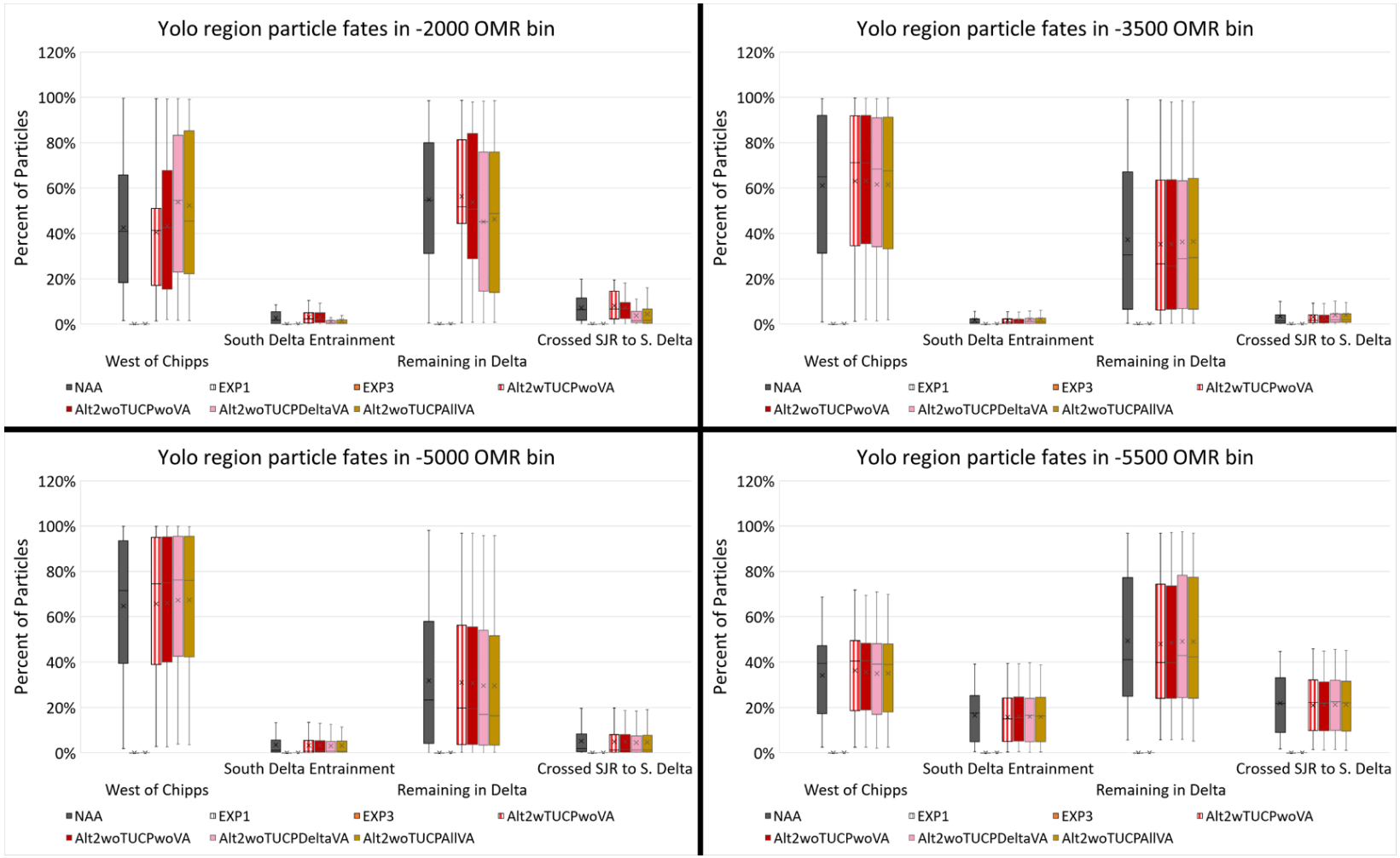

Figure I.8-37. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Yolo region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, EXP 1, EXP 3, and four phases of Alternative 2.

I.8.4.4.3 Neutrally Buoyant, Inflow and OMR Bins [EIS, Figure I.8-38 through Figure I.8-55]

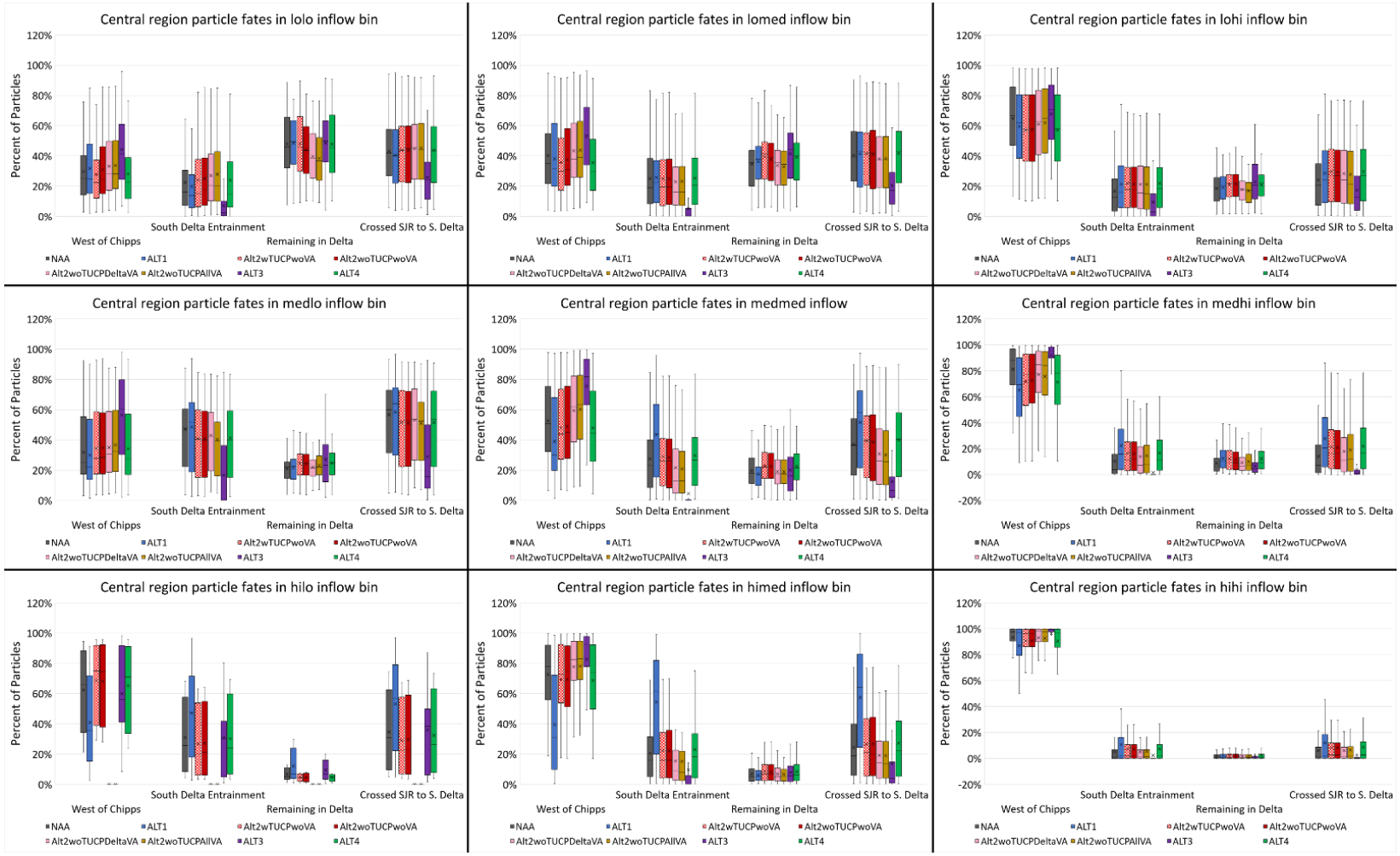

Figure I.8-38. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Central Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

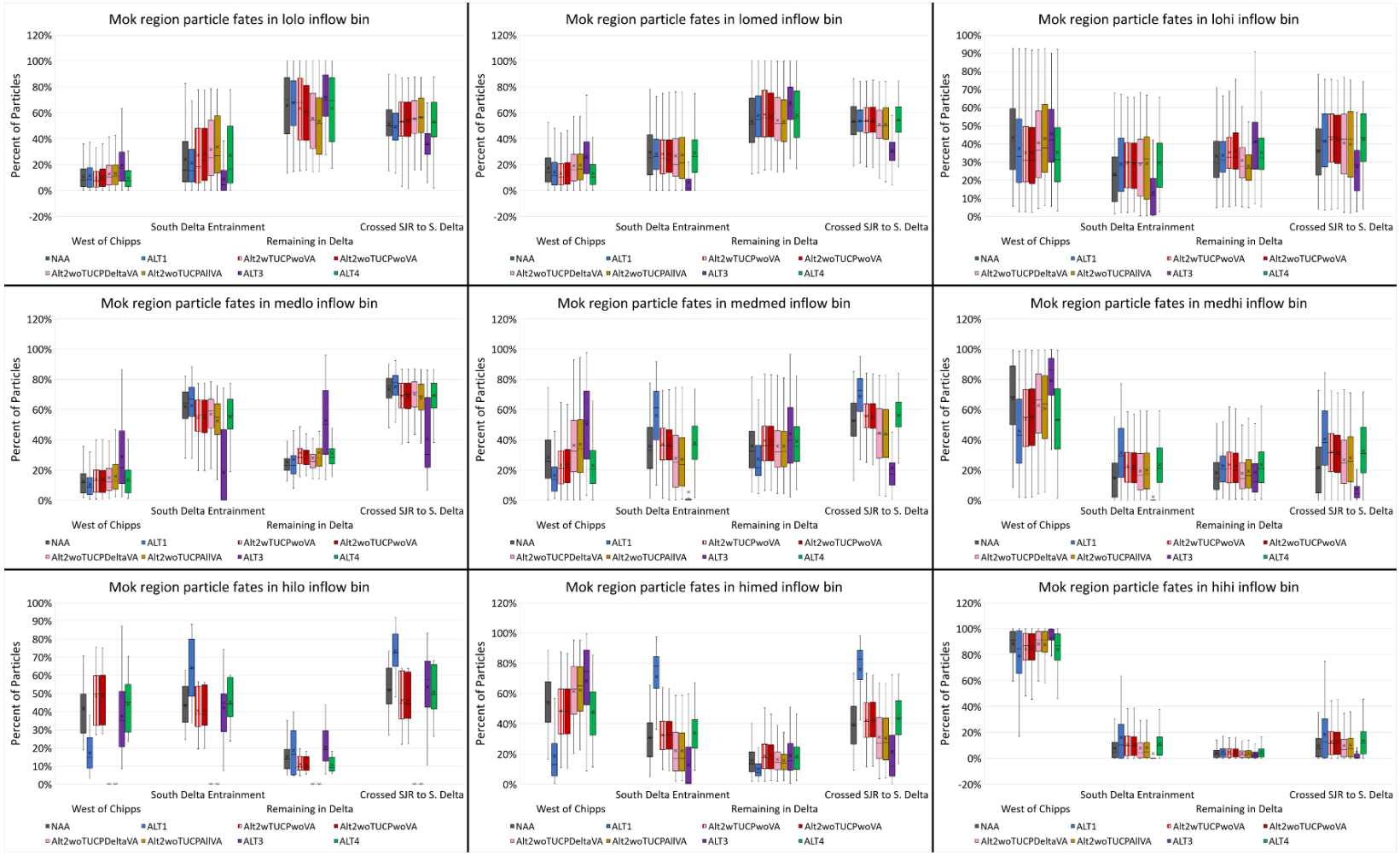

Figure I.8-39. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Mokelumne River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

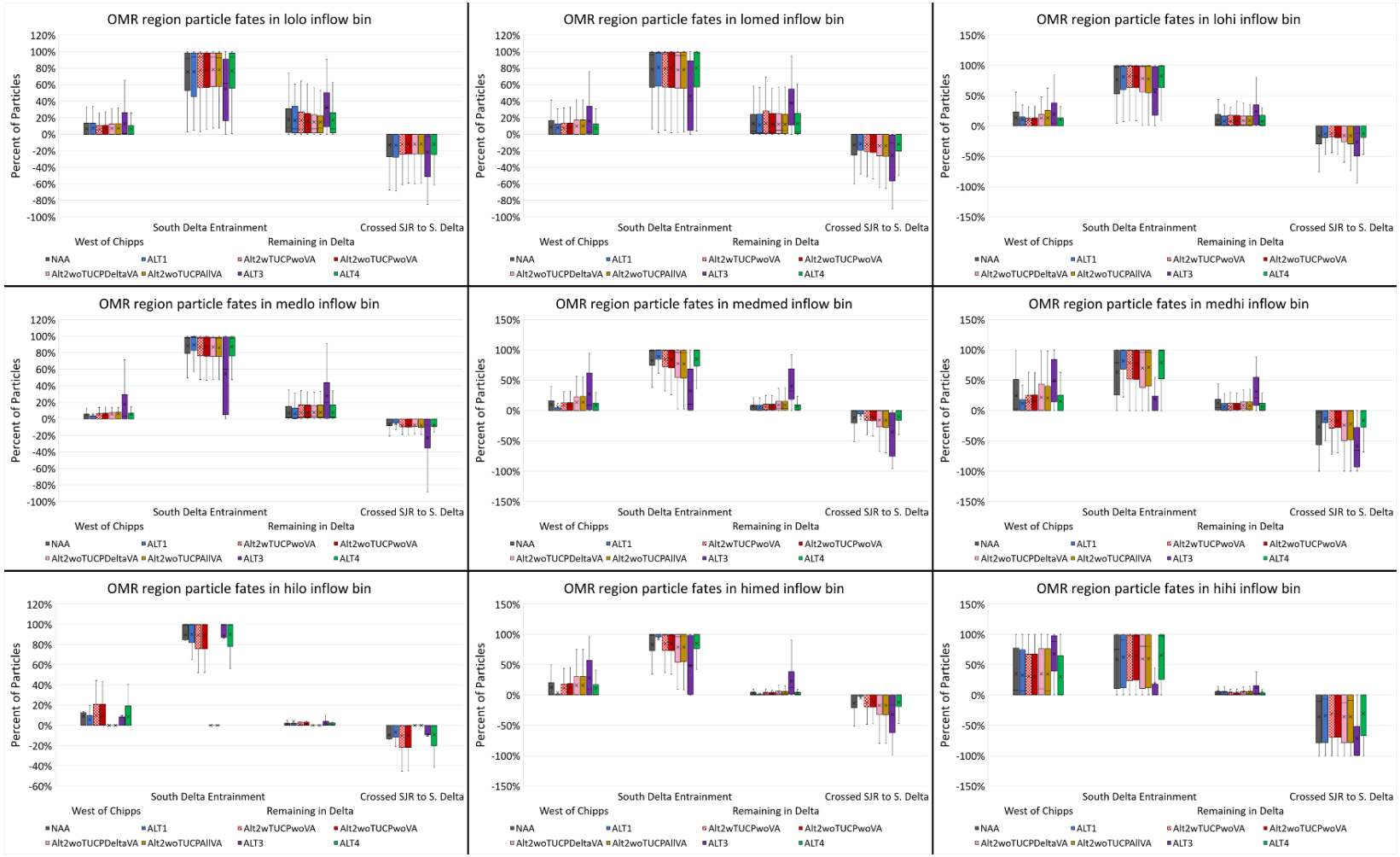

Figure I.8-40. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Old and Middle River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

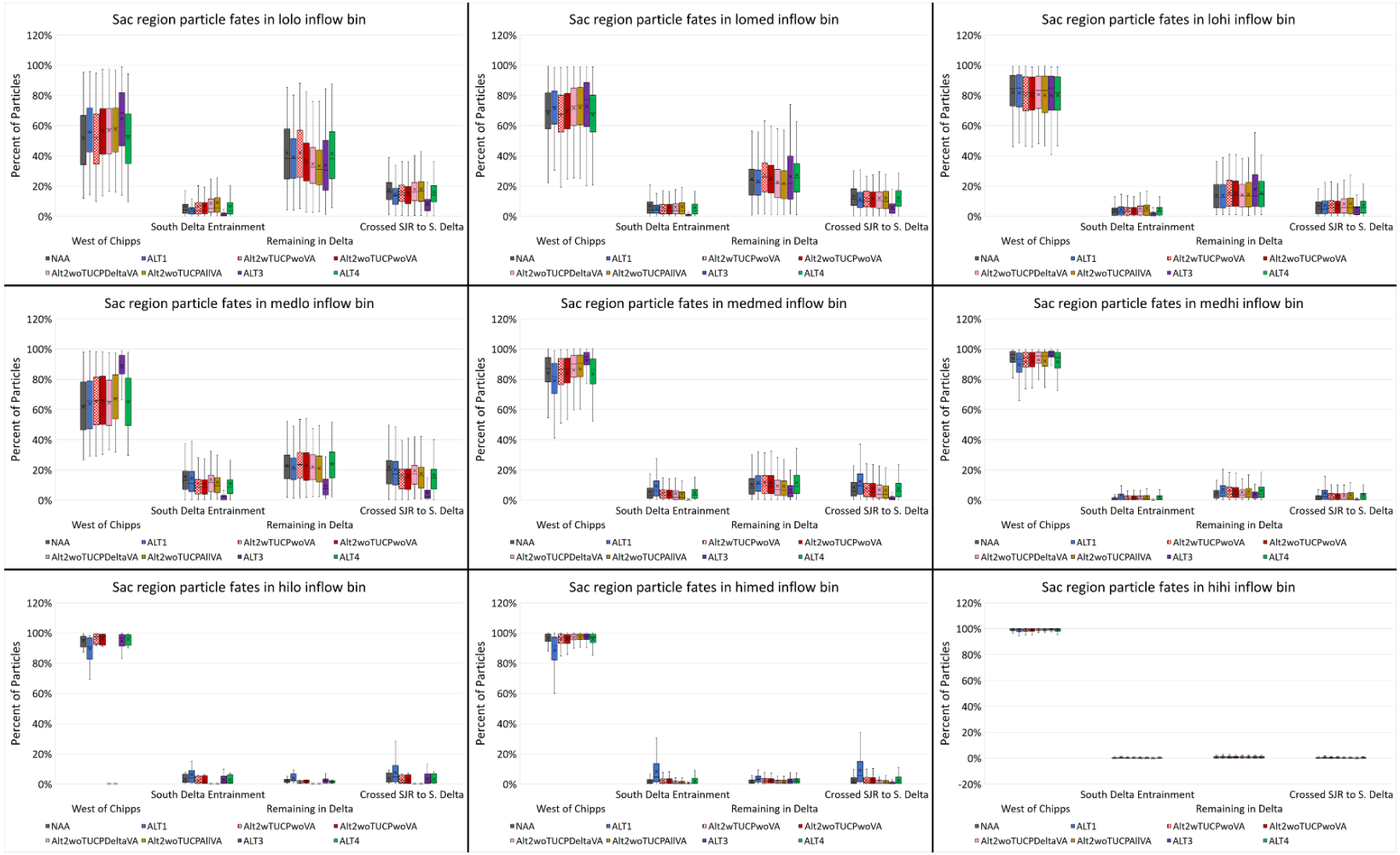

Figure I.8-41. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Sacramento River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

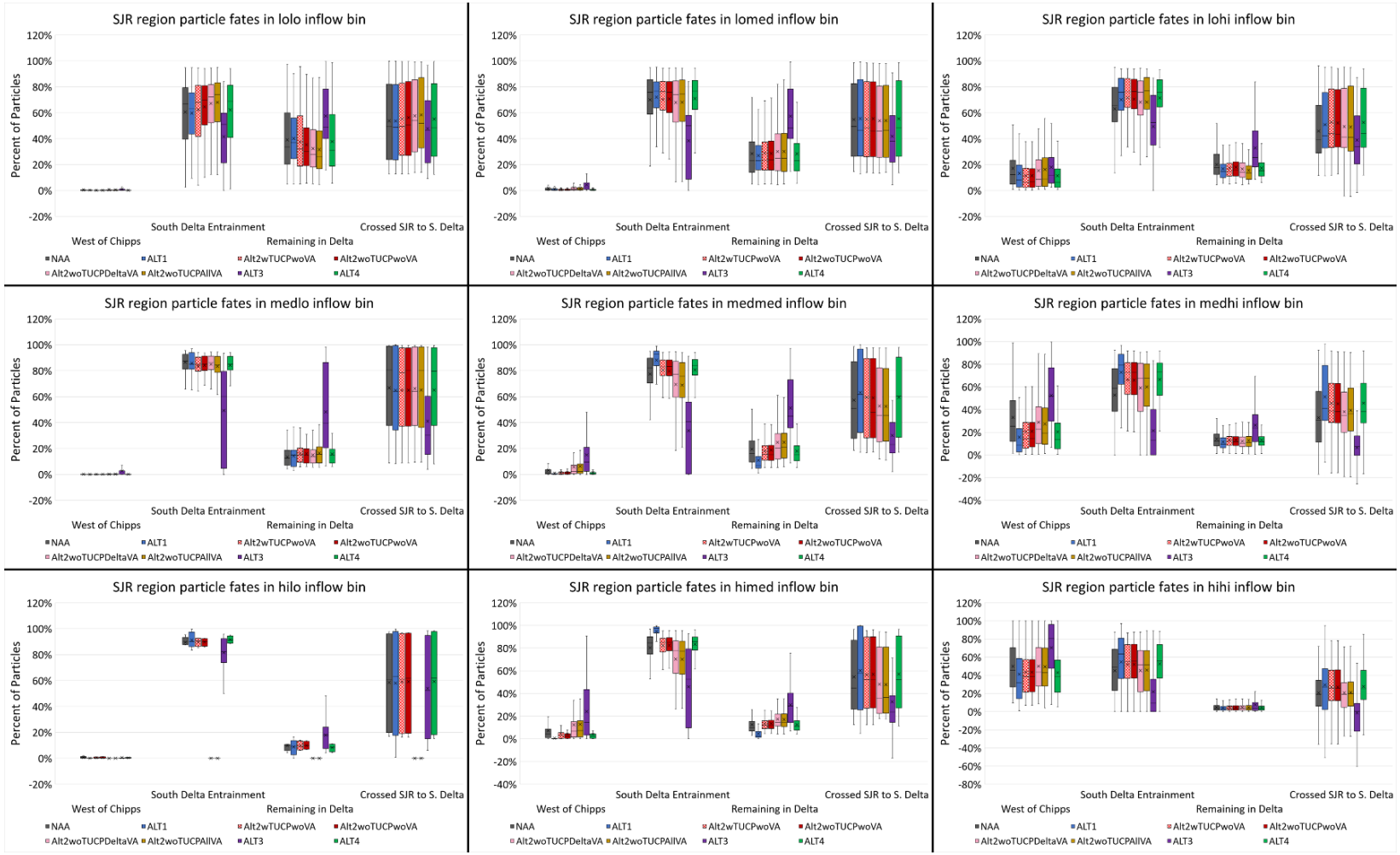

Figure I.8-42. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at San Joaquin River region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

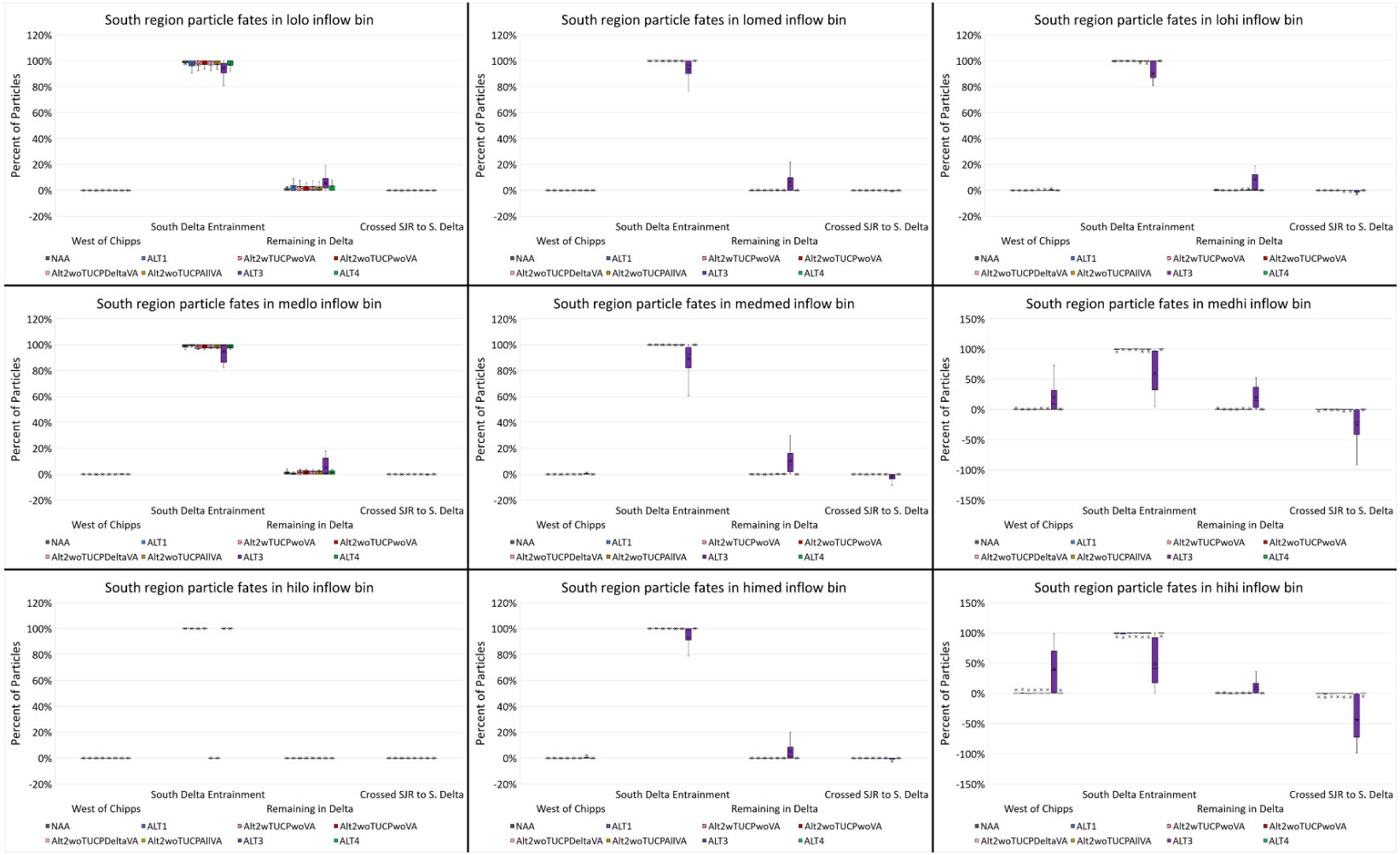

Figure I.8-43. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at South Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

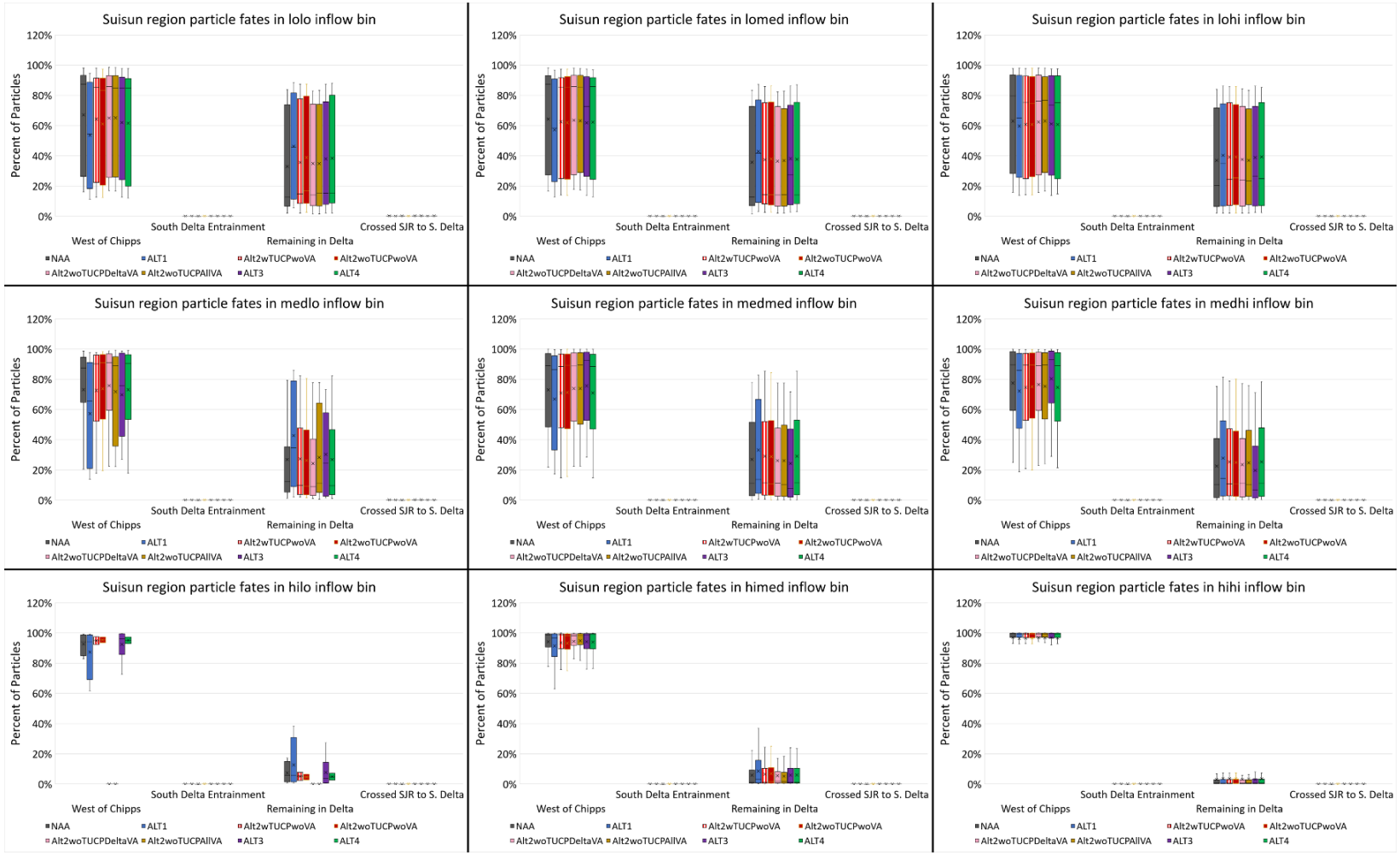

Figure I.8-44. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Suisun region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

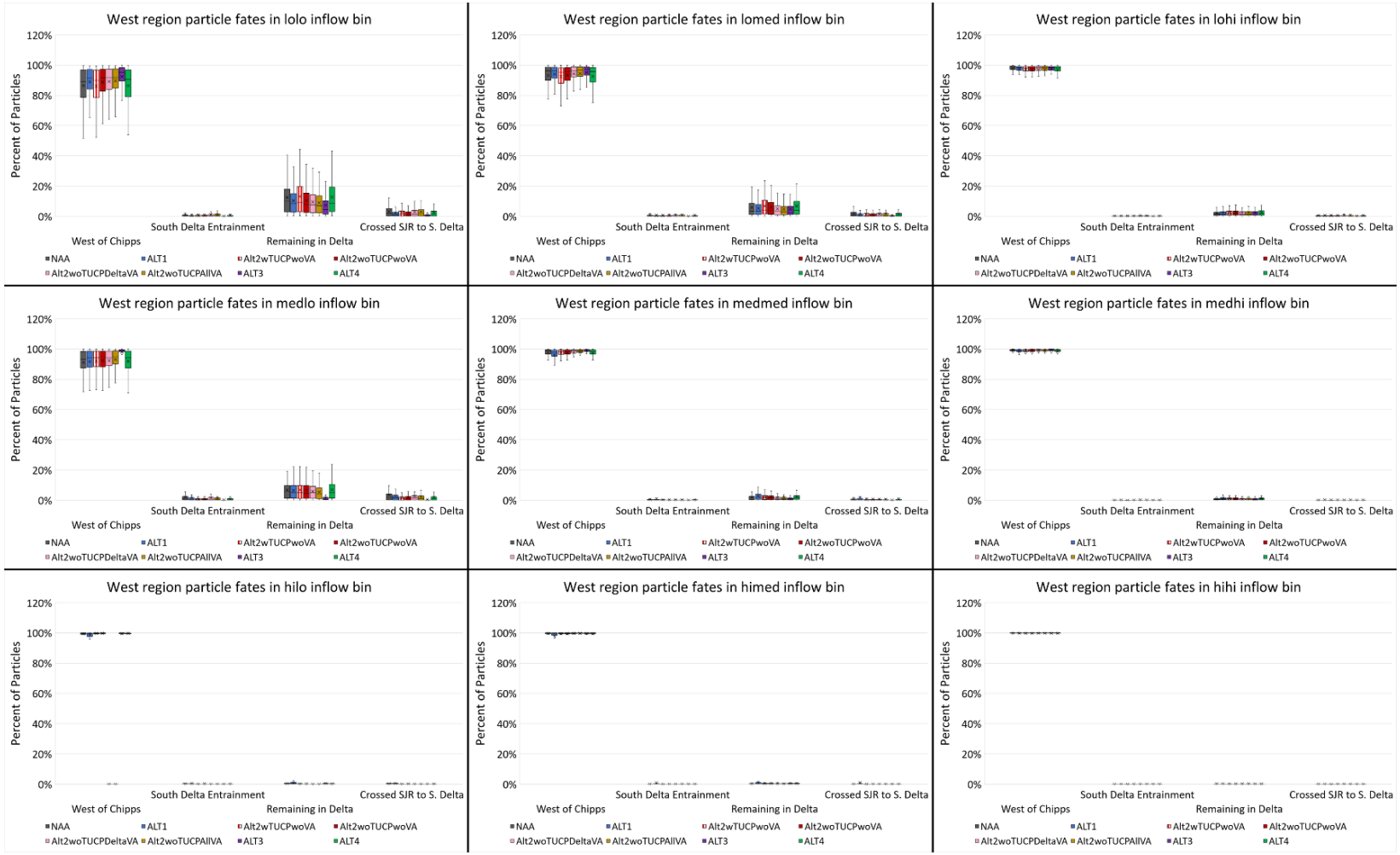

Figure I.8-45. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at West Delta region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

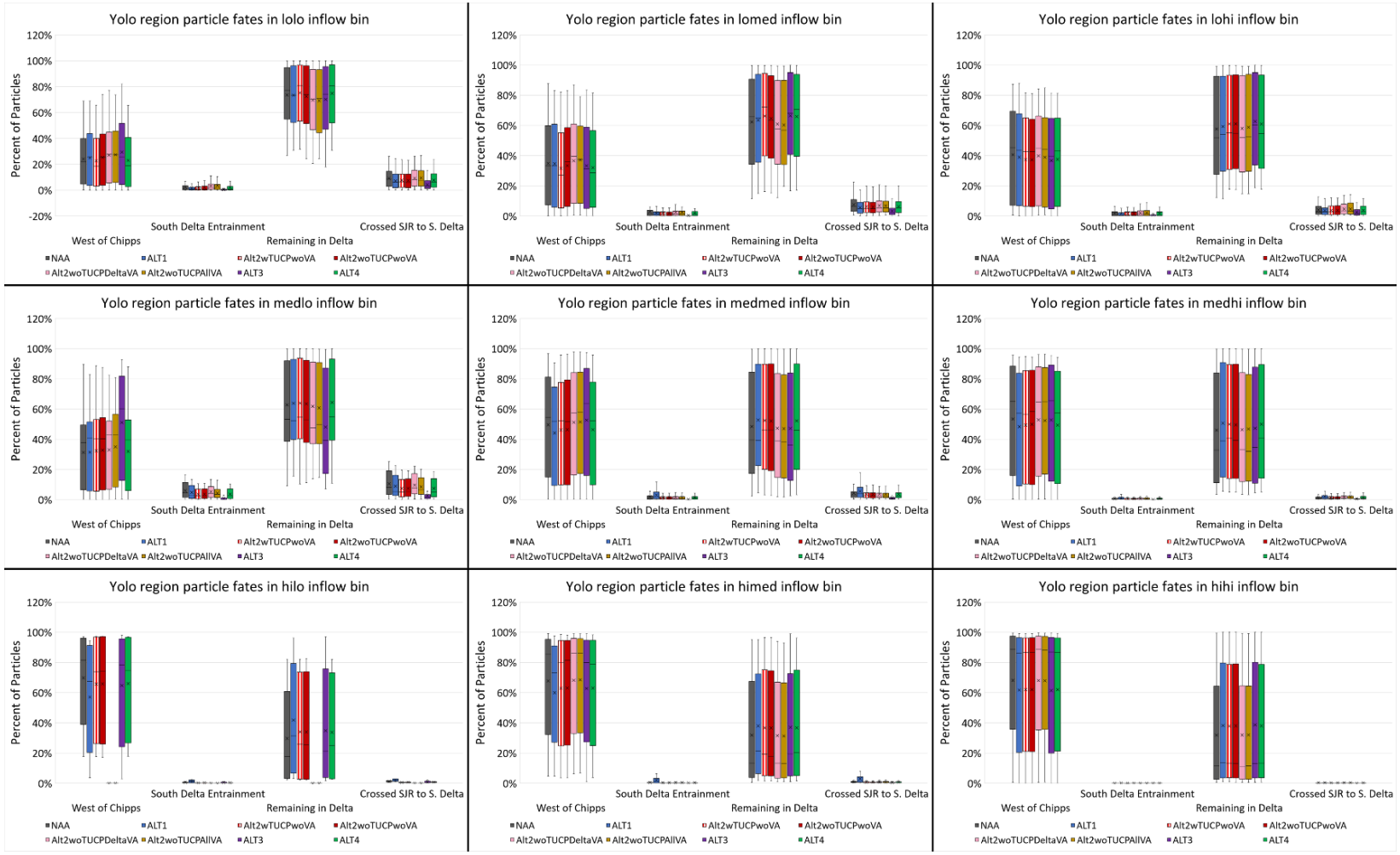

Figure I.8-46. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Yolo region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

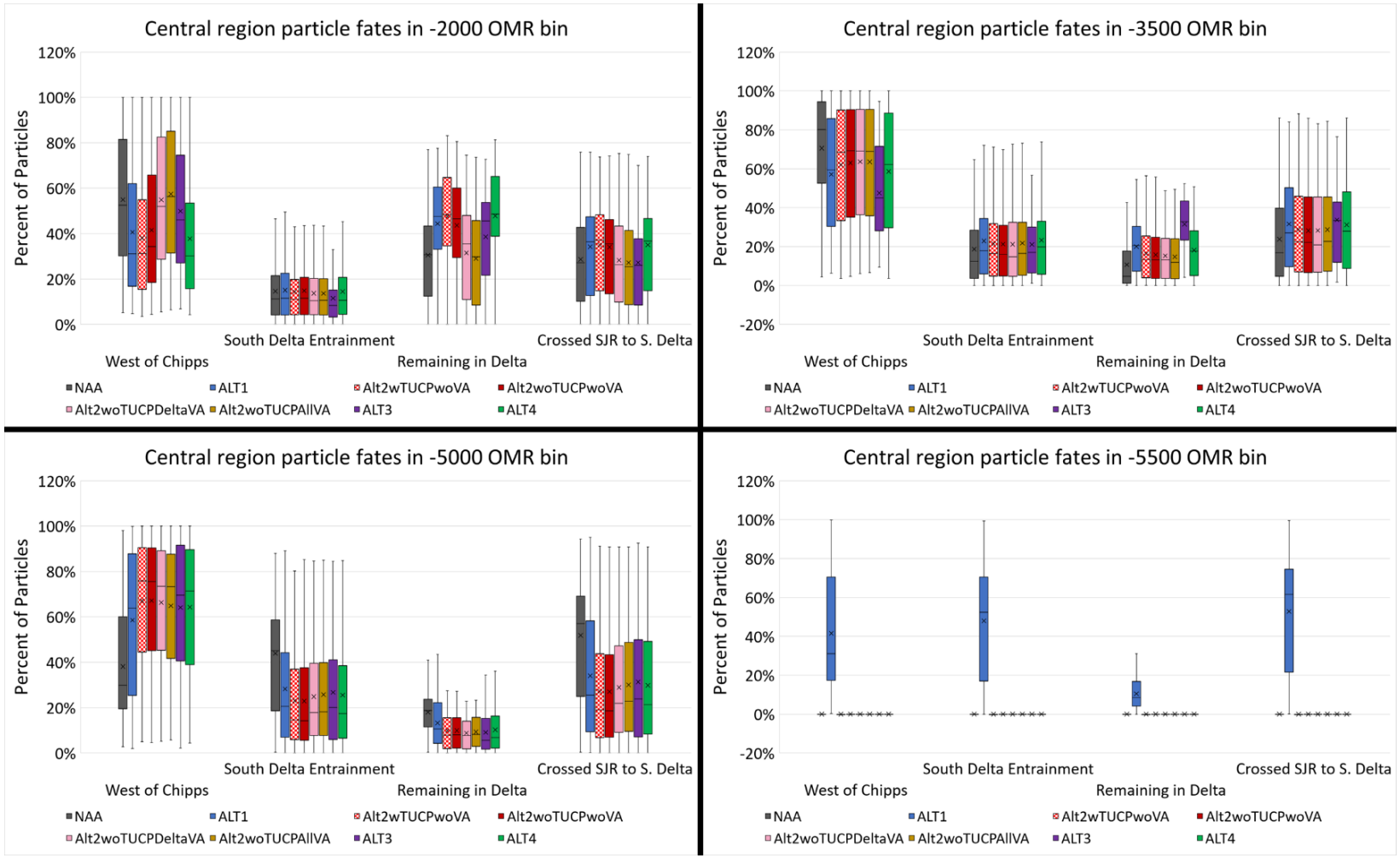

Figure I.8-47. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Central Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

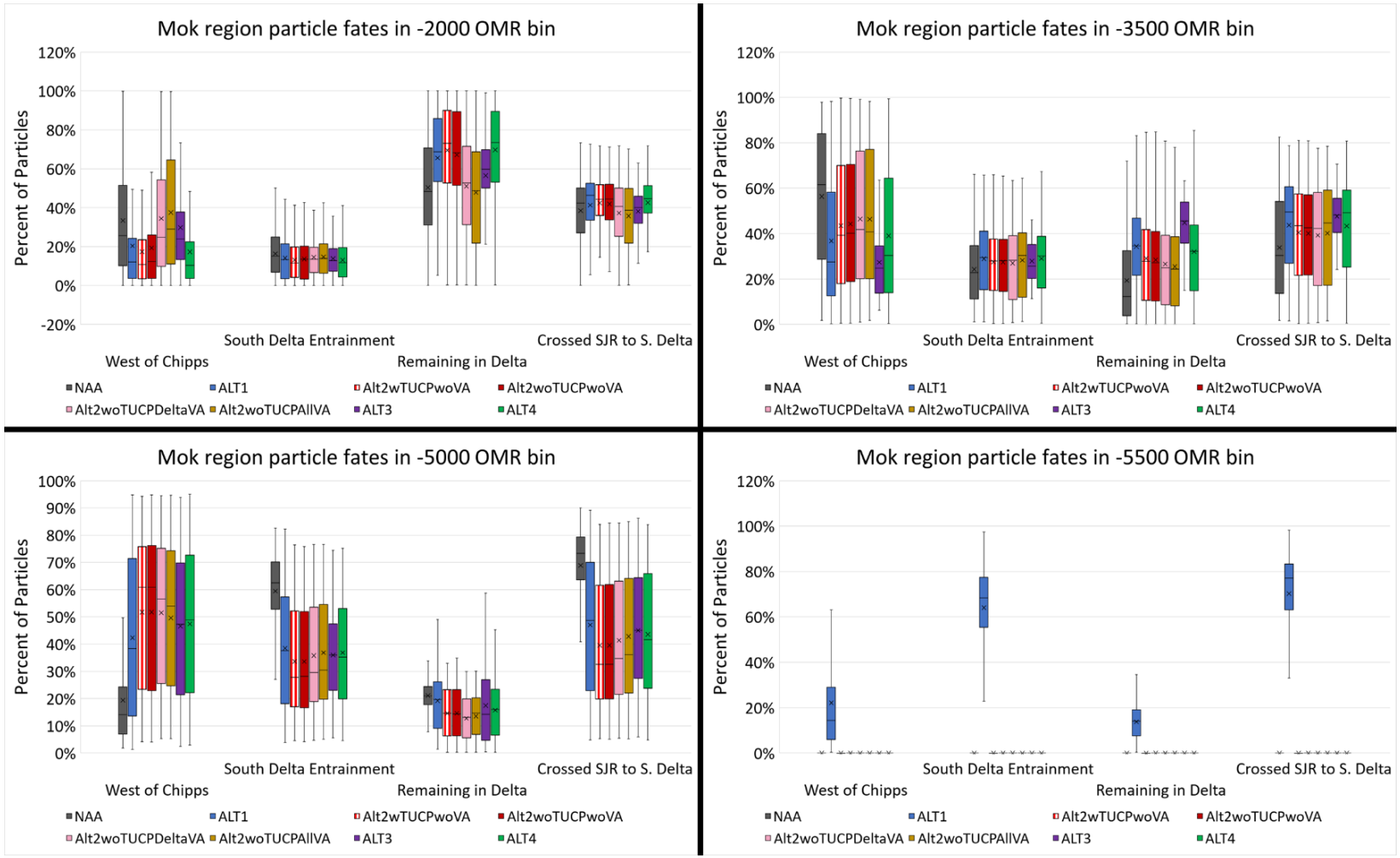

Figure I.8-48. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Mokelumne River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

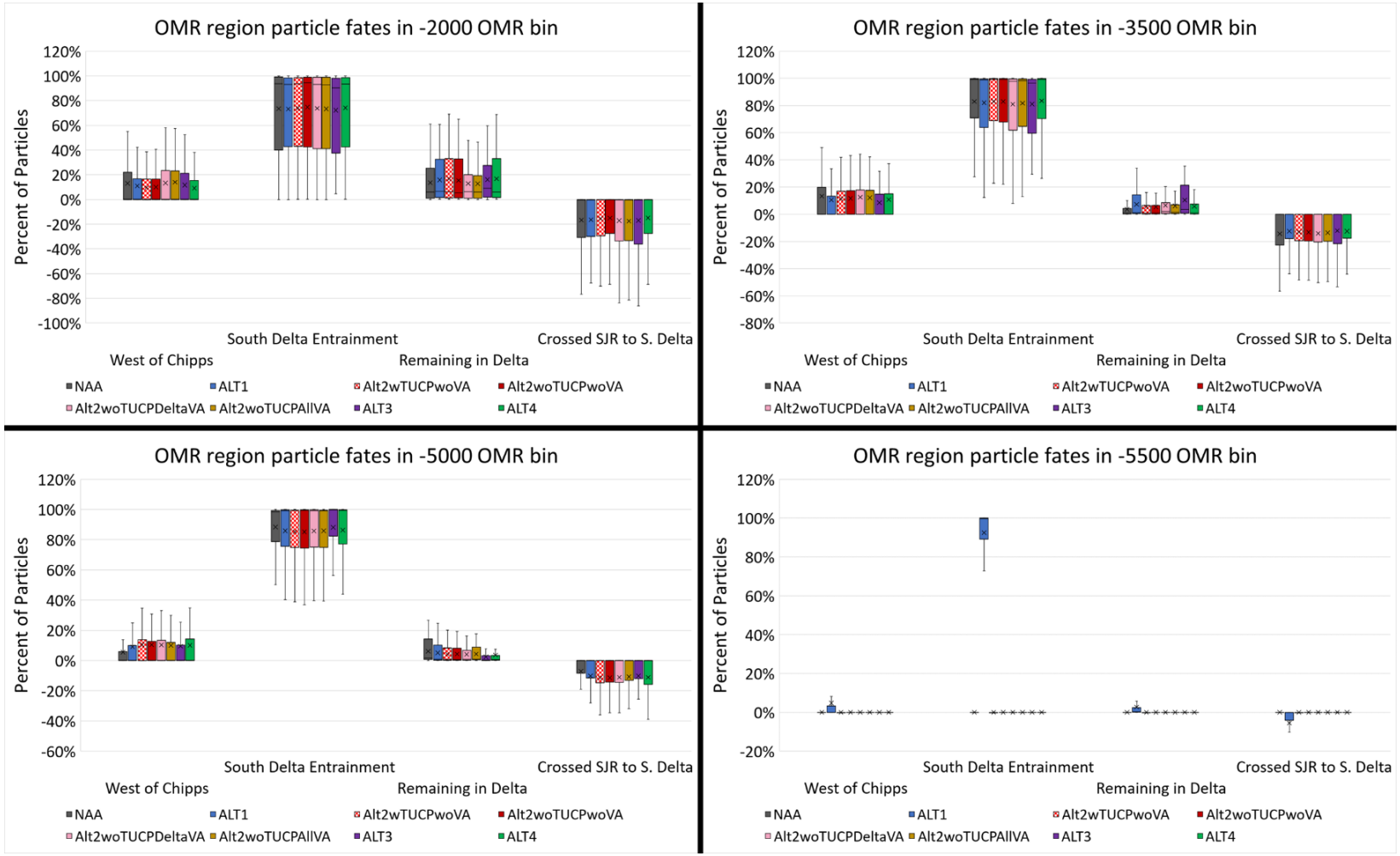

Figure I.8-49. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Old and Middle River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

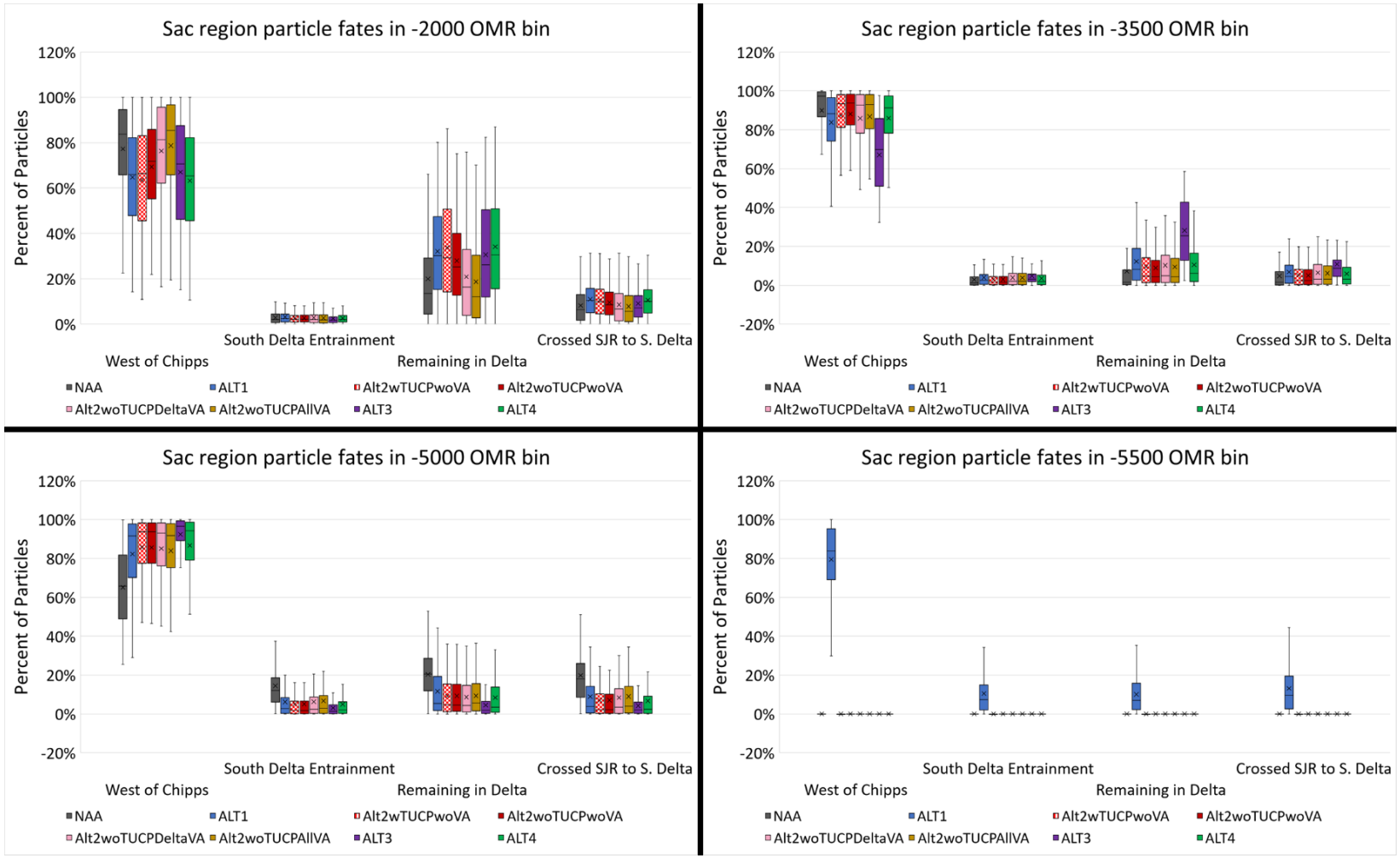

Figure I.8-50. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Sacramento River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

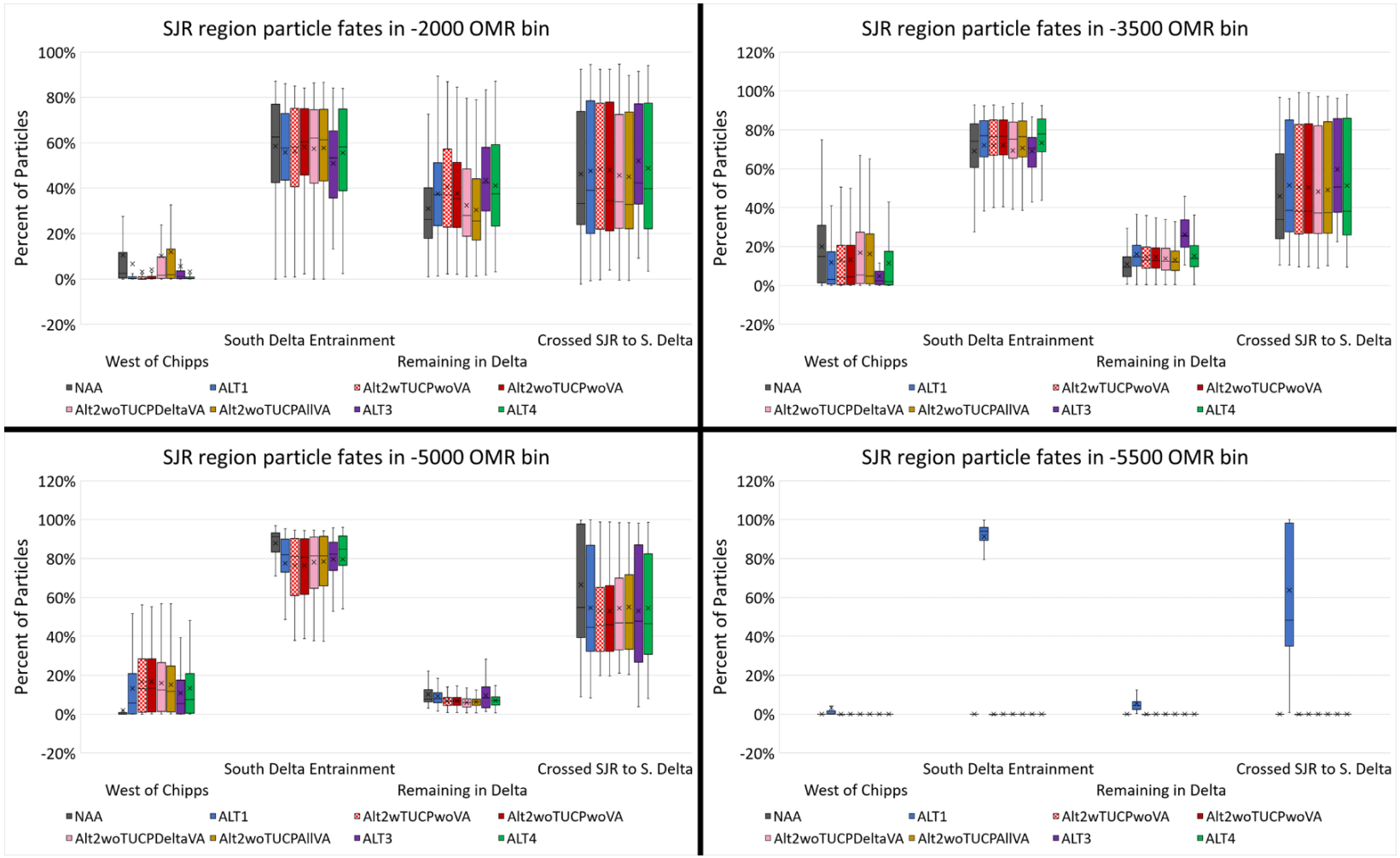

Figure I.8-51. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at San Joaquin River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

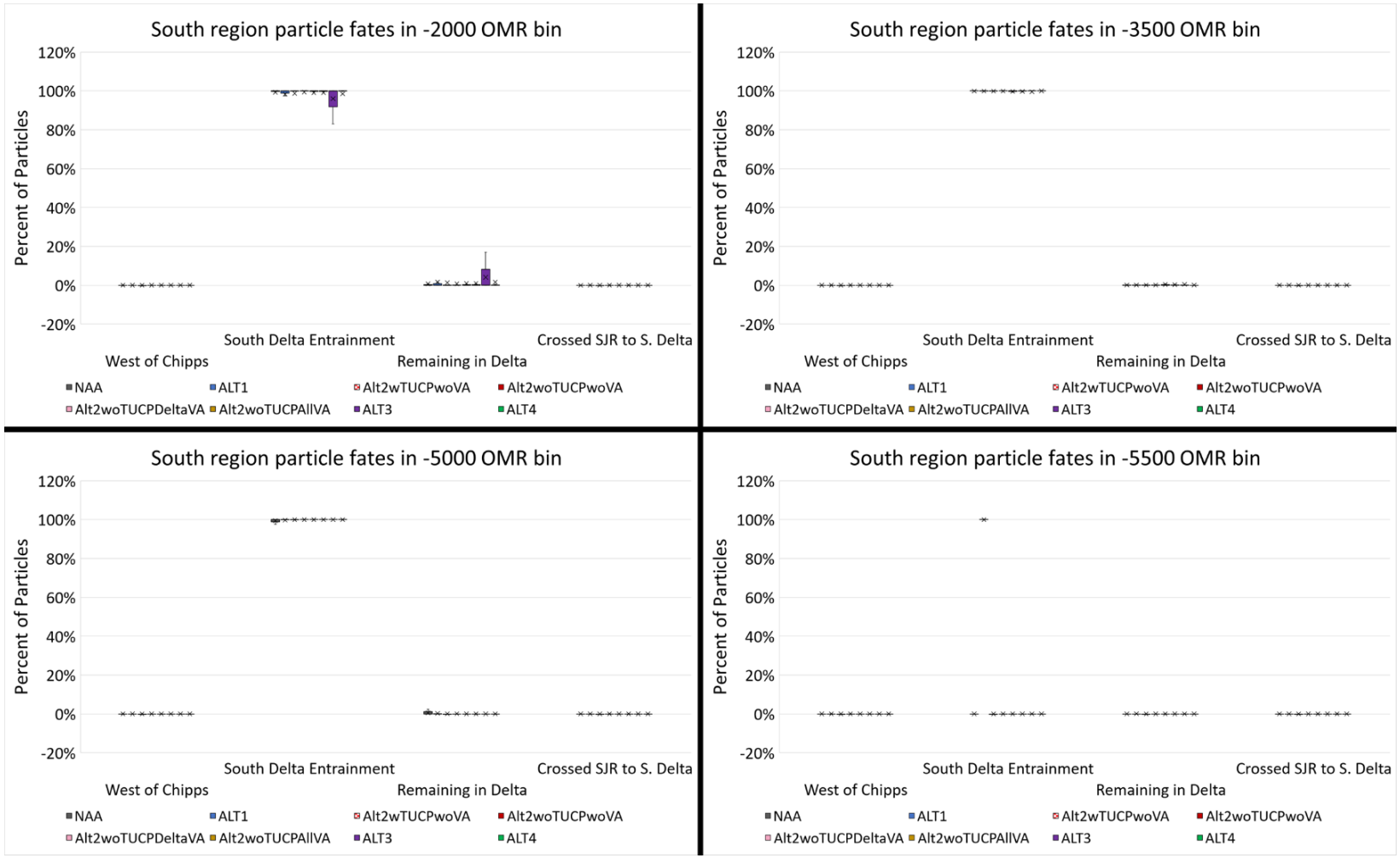

Figure I.8-52. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at South Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

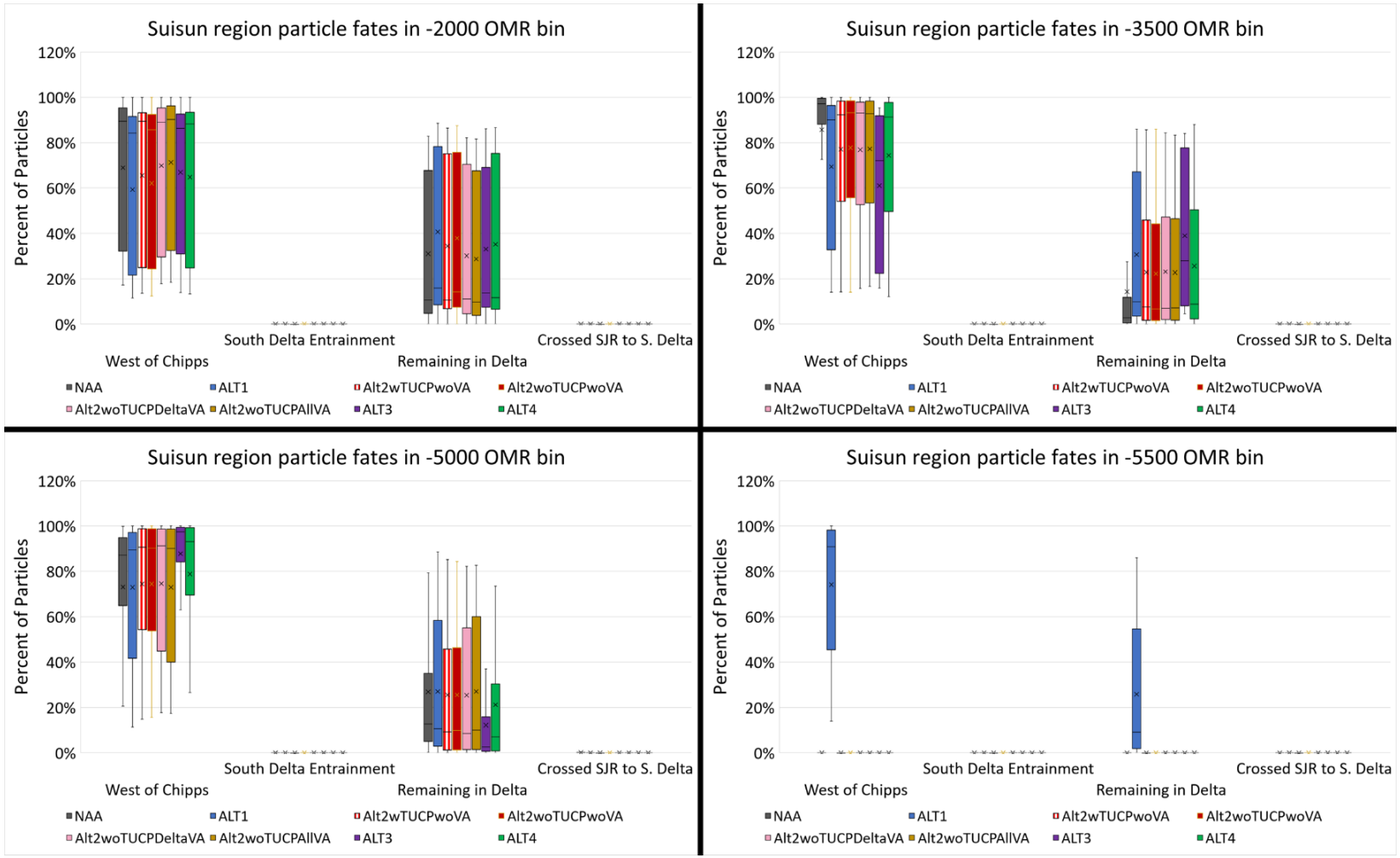

Figure I.8-53. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Suisun region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

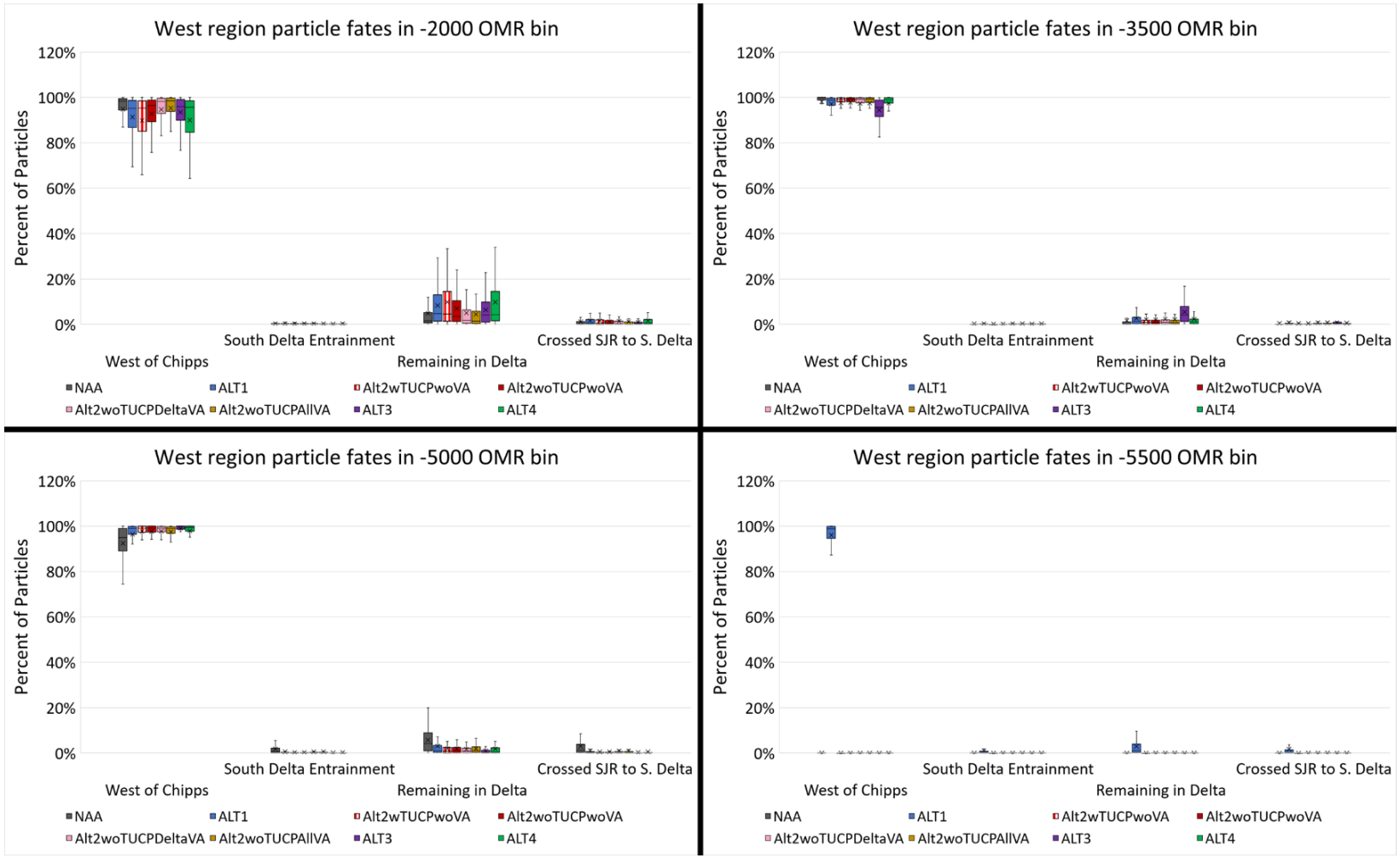

Figure I.8-54. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at West Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

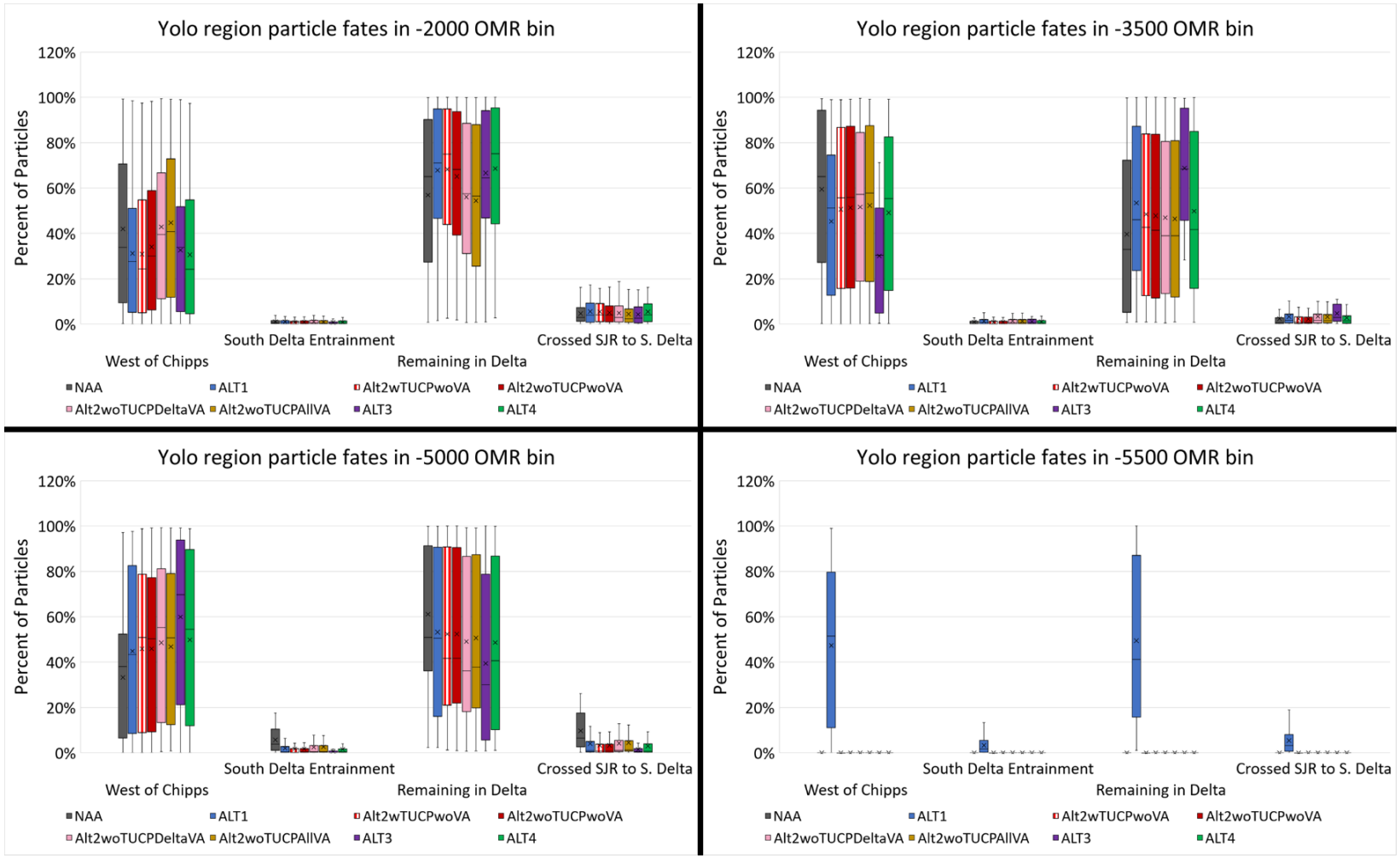

Figure I.8-55. Box and whisker plot of mean March through June particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for neutrally buoyant particles injected at Yolo region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

I.8.4.4.4 Surface Oriented, Inflow and OMR Bins [EIS, Figure I.8-56 through Figure I.8-73]

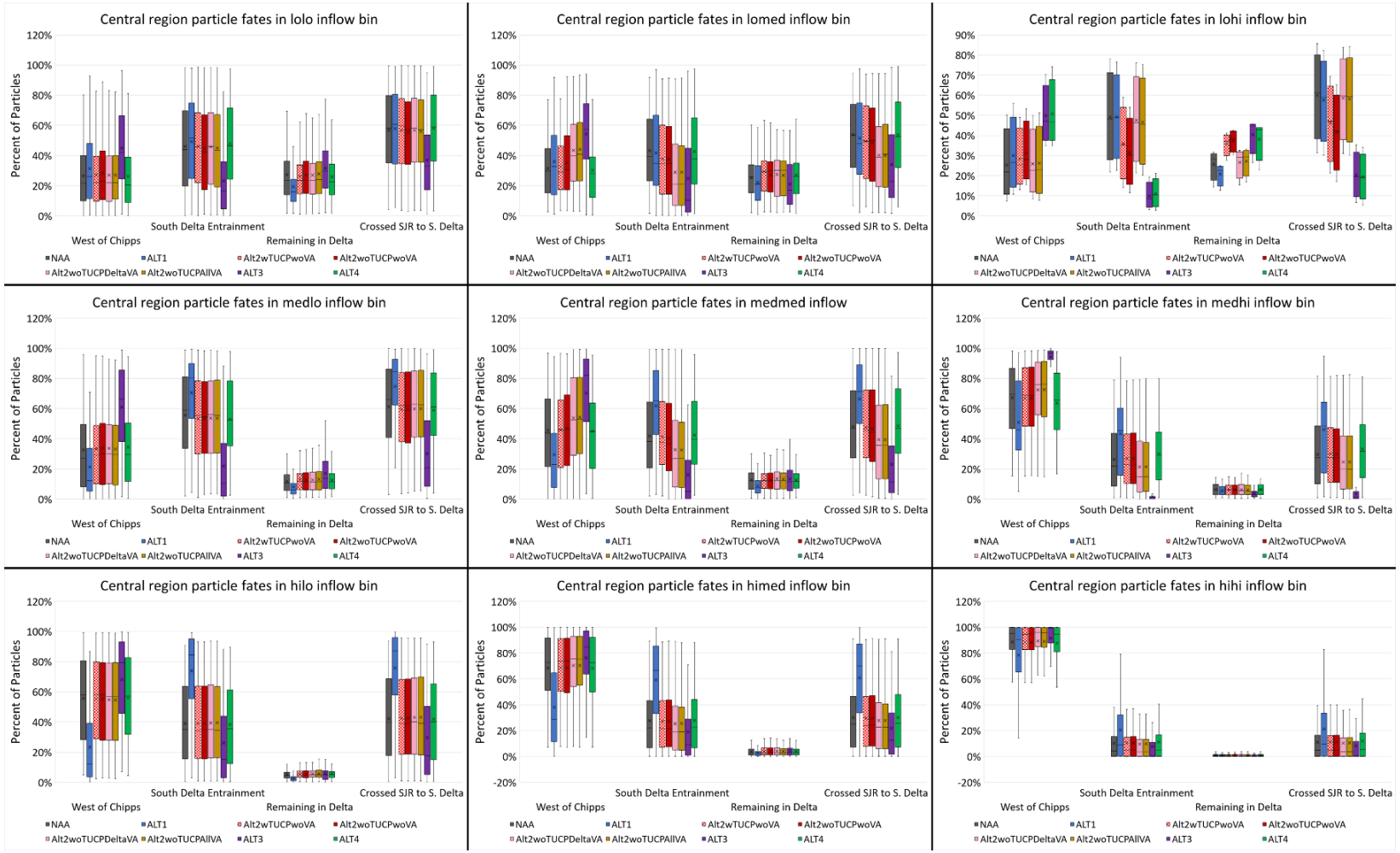

Figure I.8-56. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Central Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

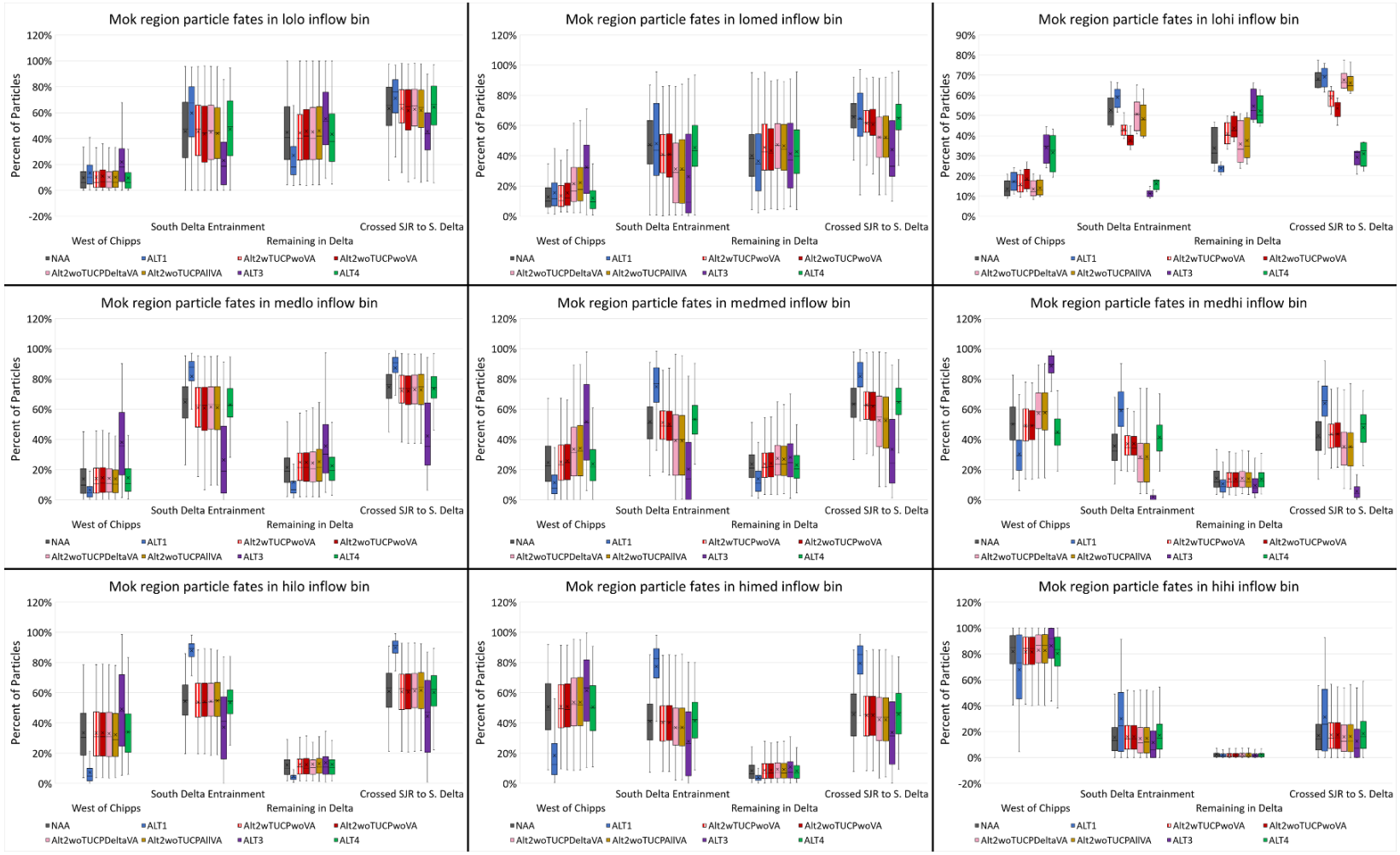

Figure I.8-57. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Mokelumne River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

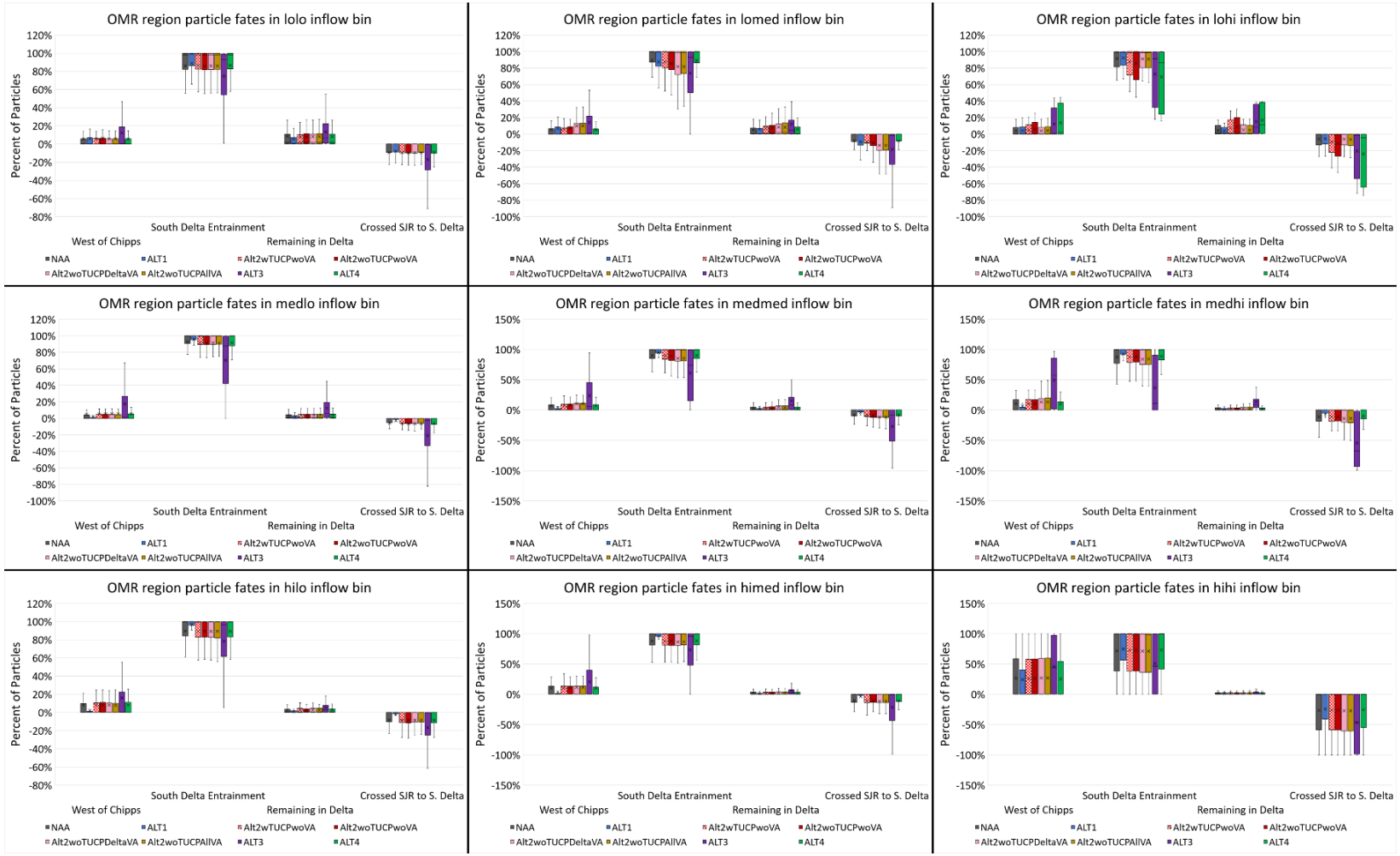

Figure I.8-58. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Old and Middle River region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

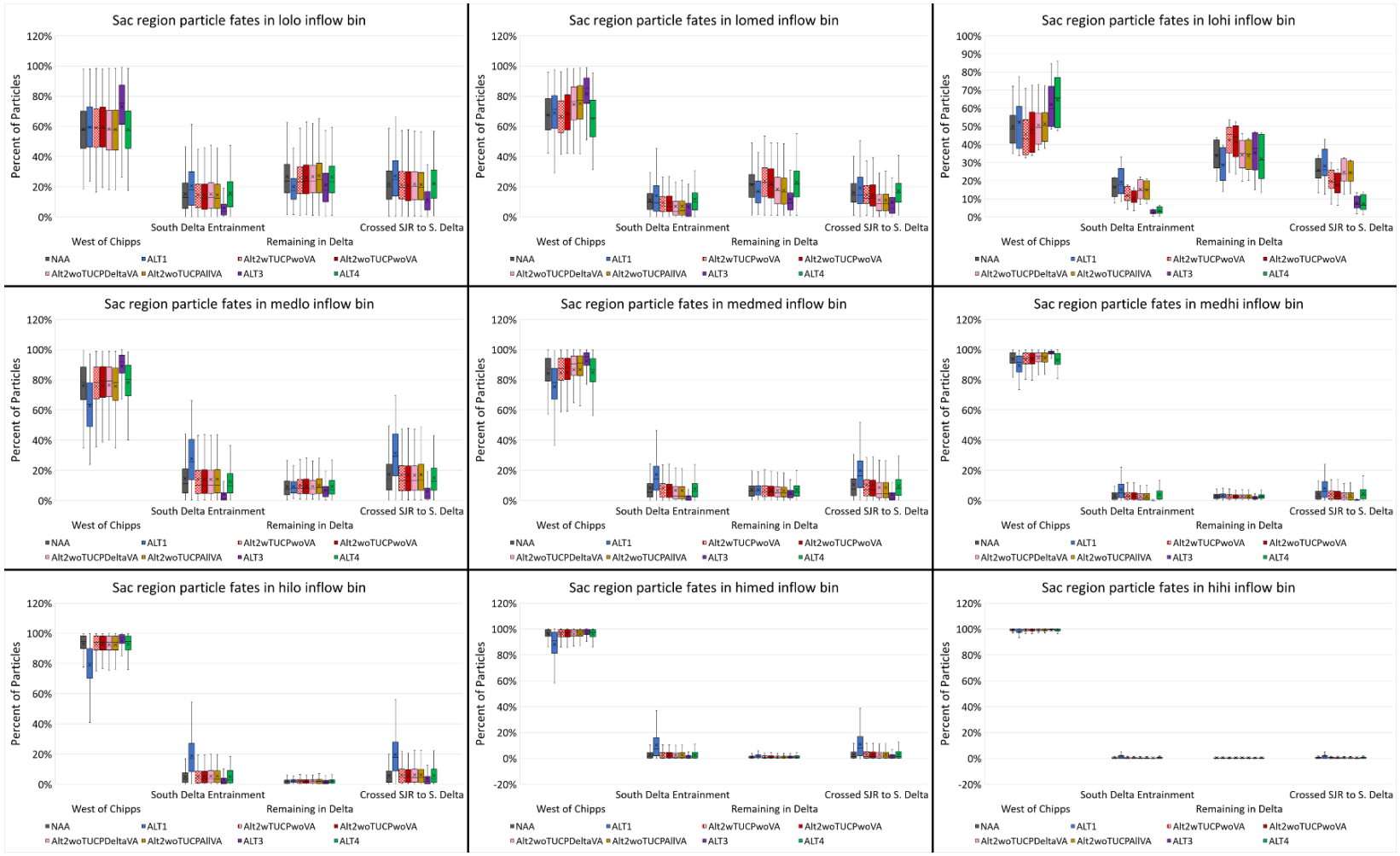

Figure I.8-59. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Sacramento River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

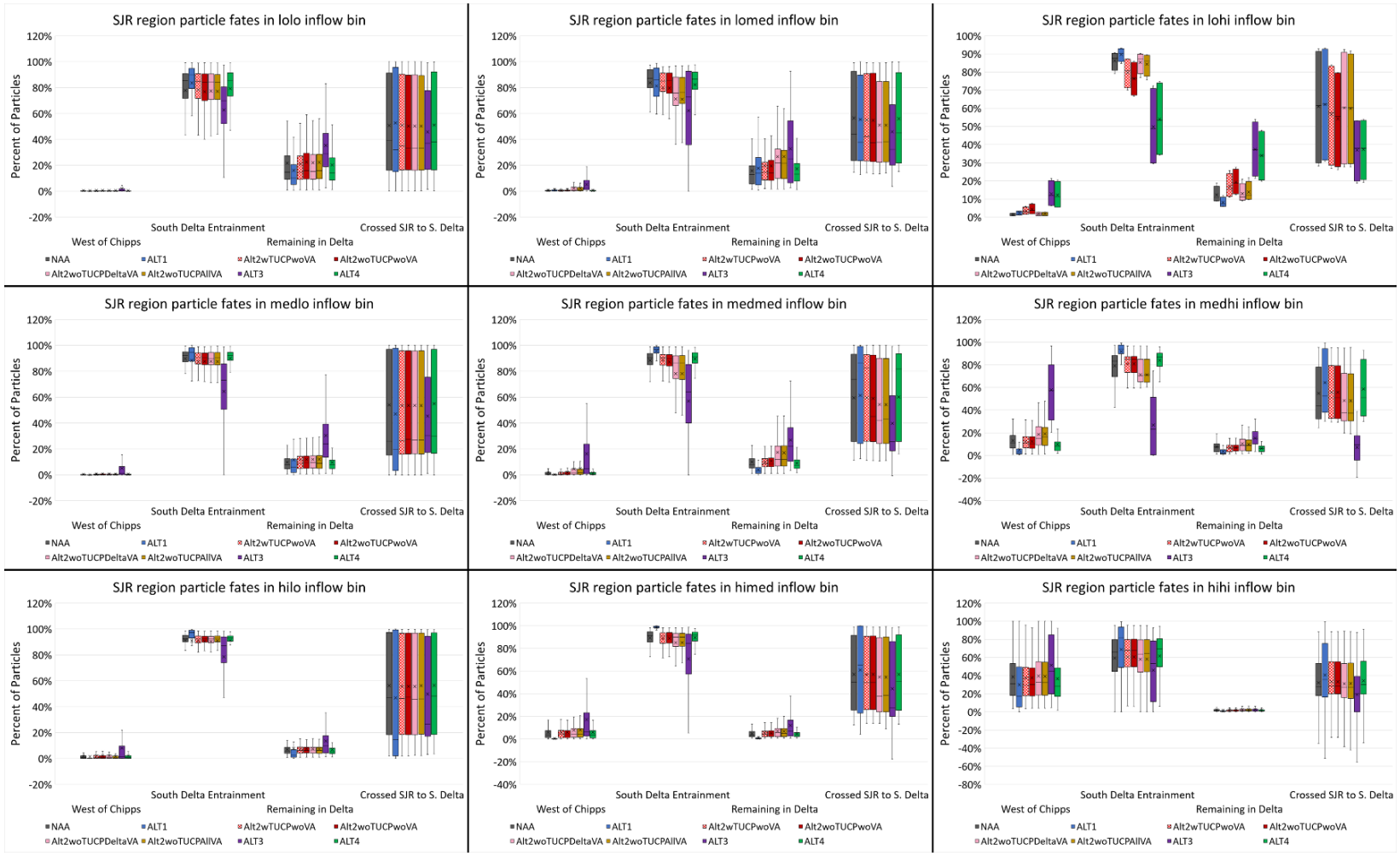

Figure I.8-60. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at San Joaquin River region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

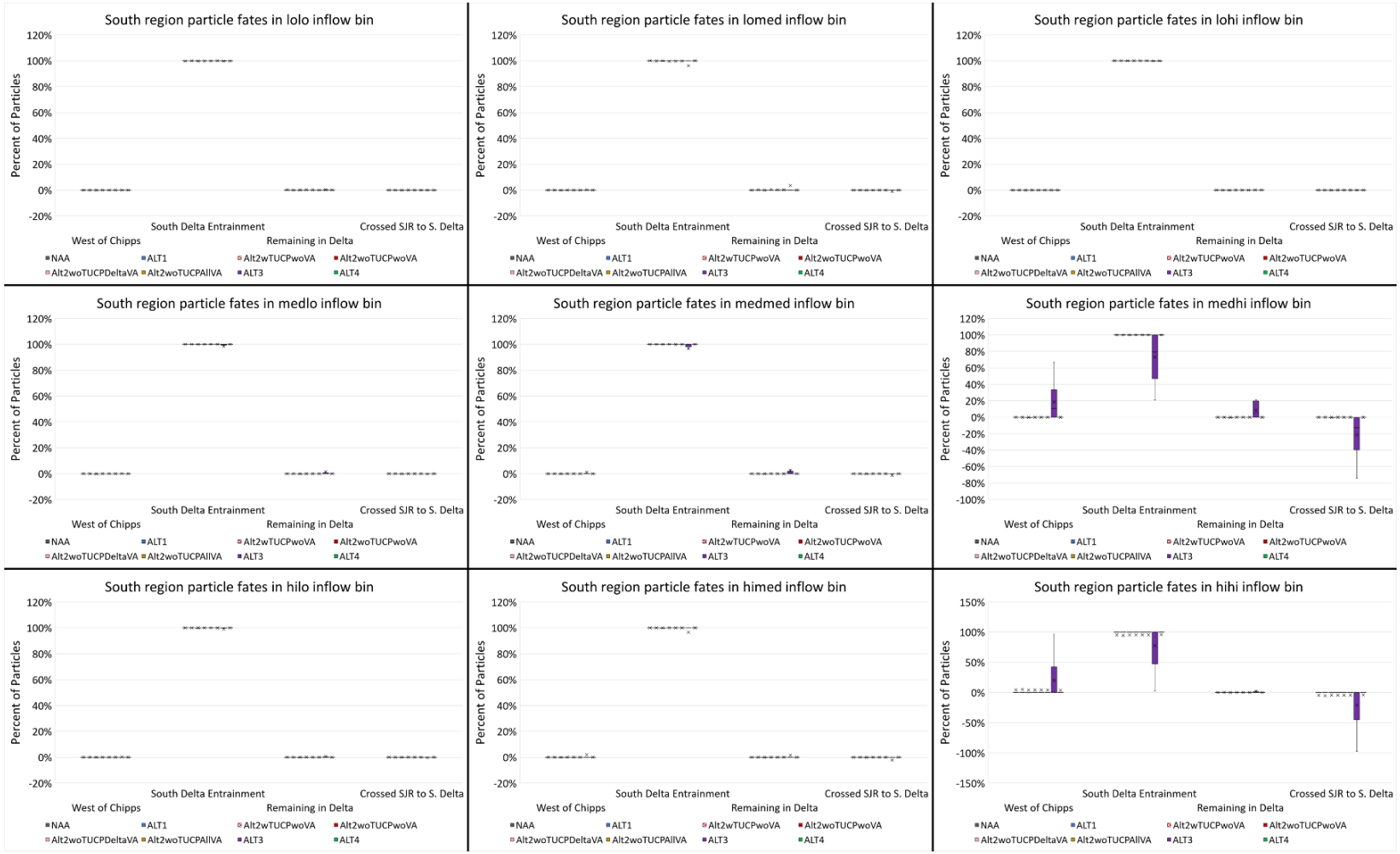

Figure I.8-61. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at South Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

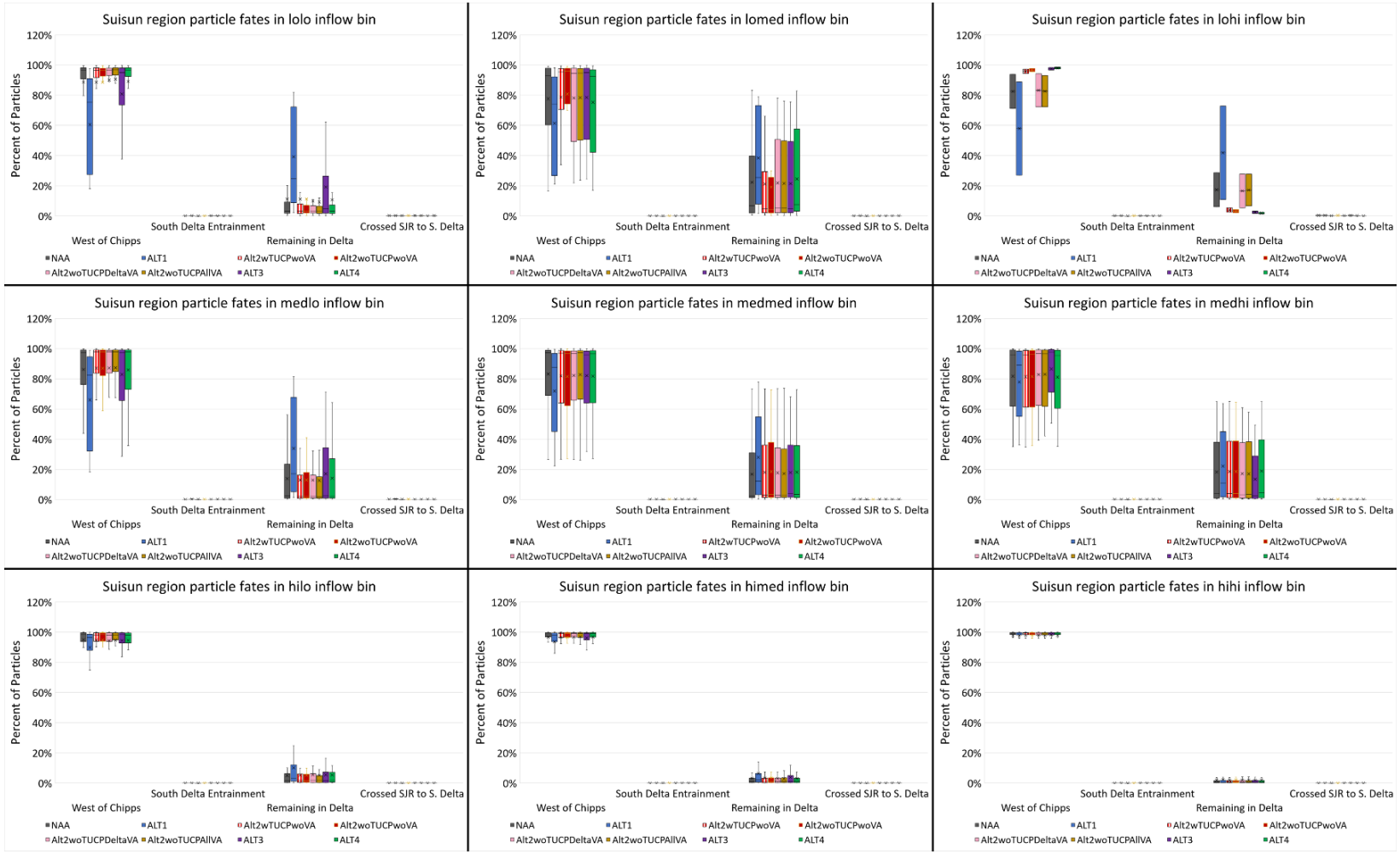

Figure I.8-62. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Suisun region by Inflow Bin (from top left to bottom right: “lolo” to “hihi”) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

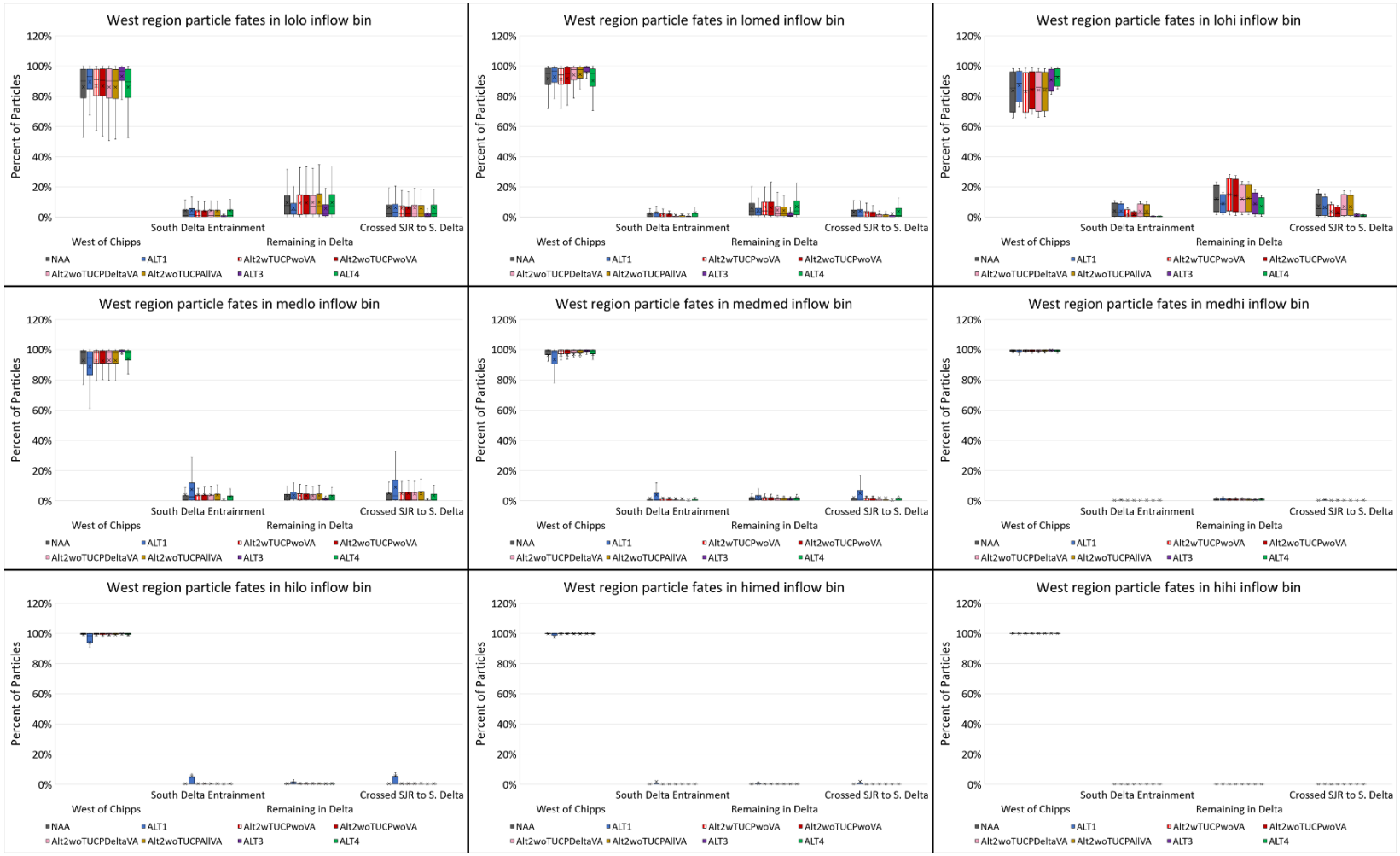

Figure I.8-63. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at West Delta region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

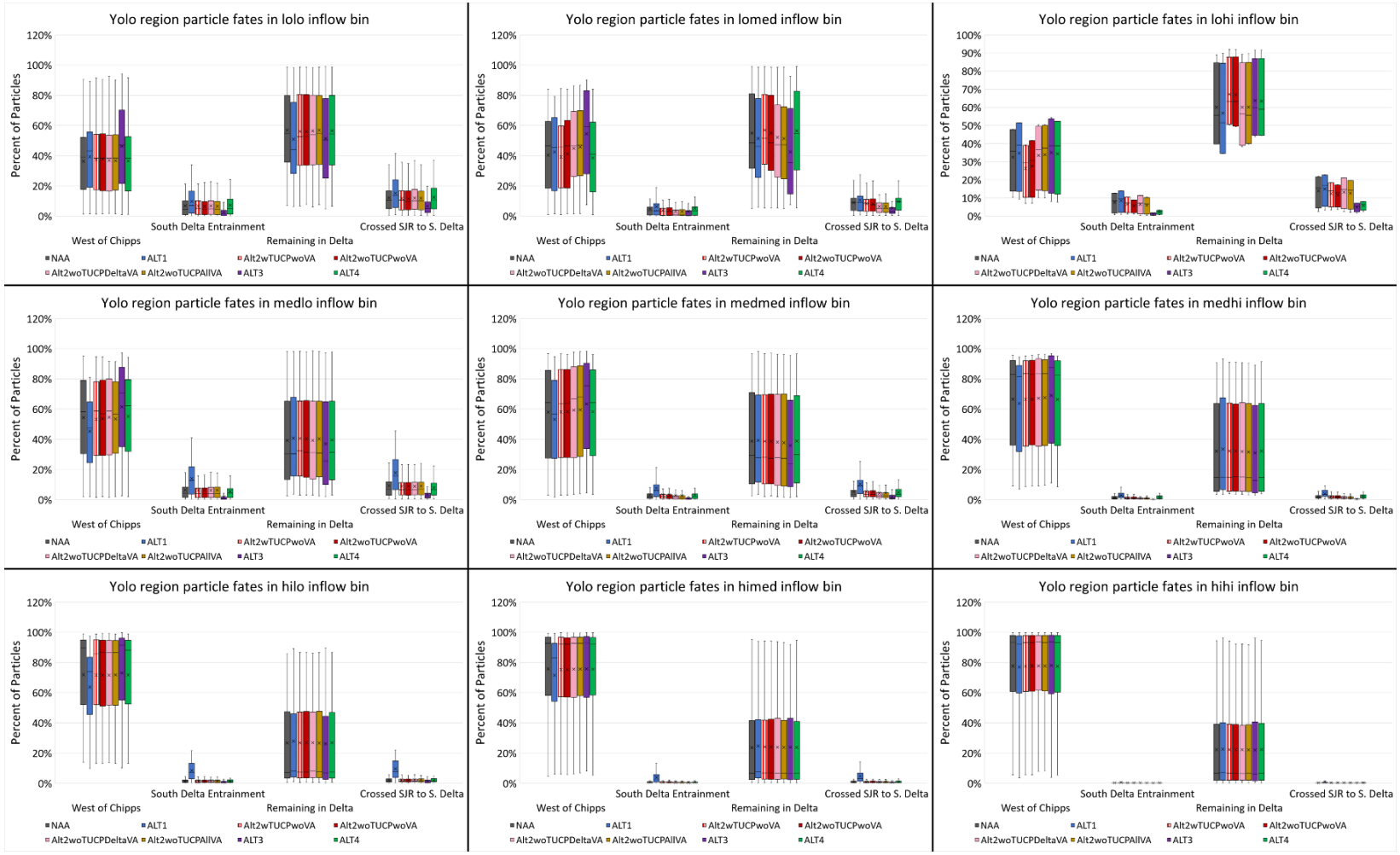

Figure I.8-64. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Yolo region by Inflow Bin (from top left to bottom right: "lolo" to "hihi") for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

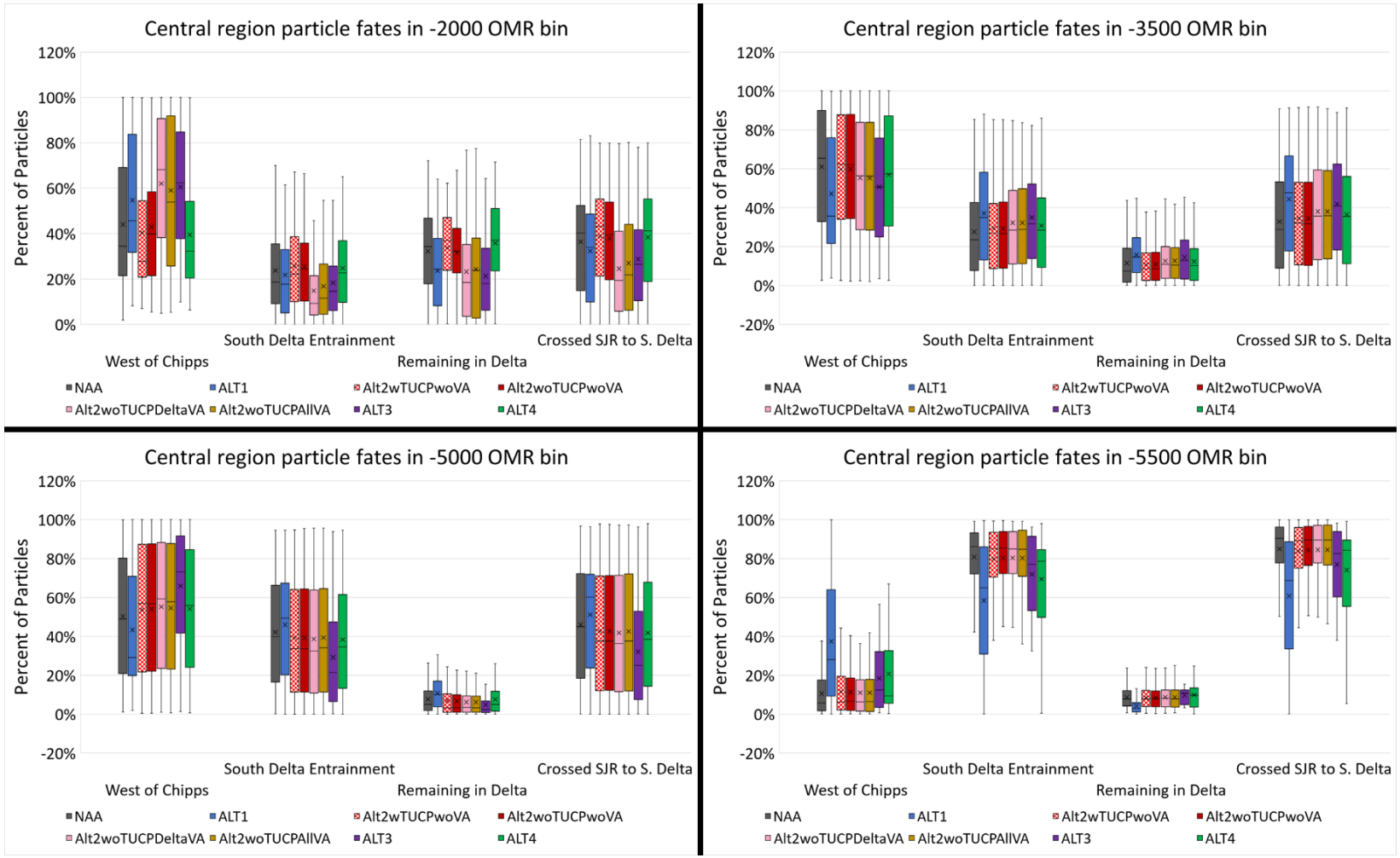

Figure I.8-65. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Central Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

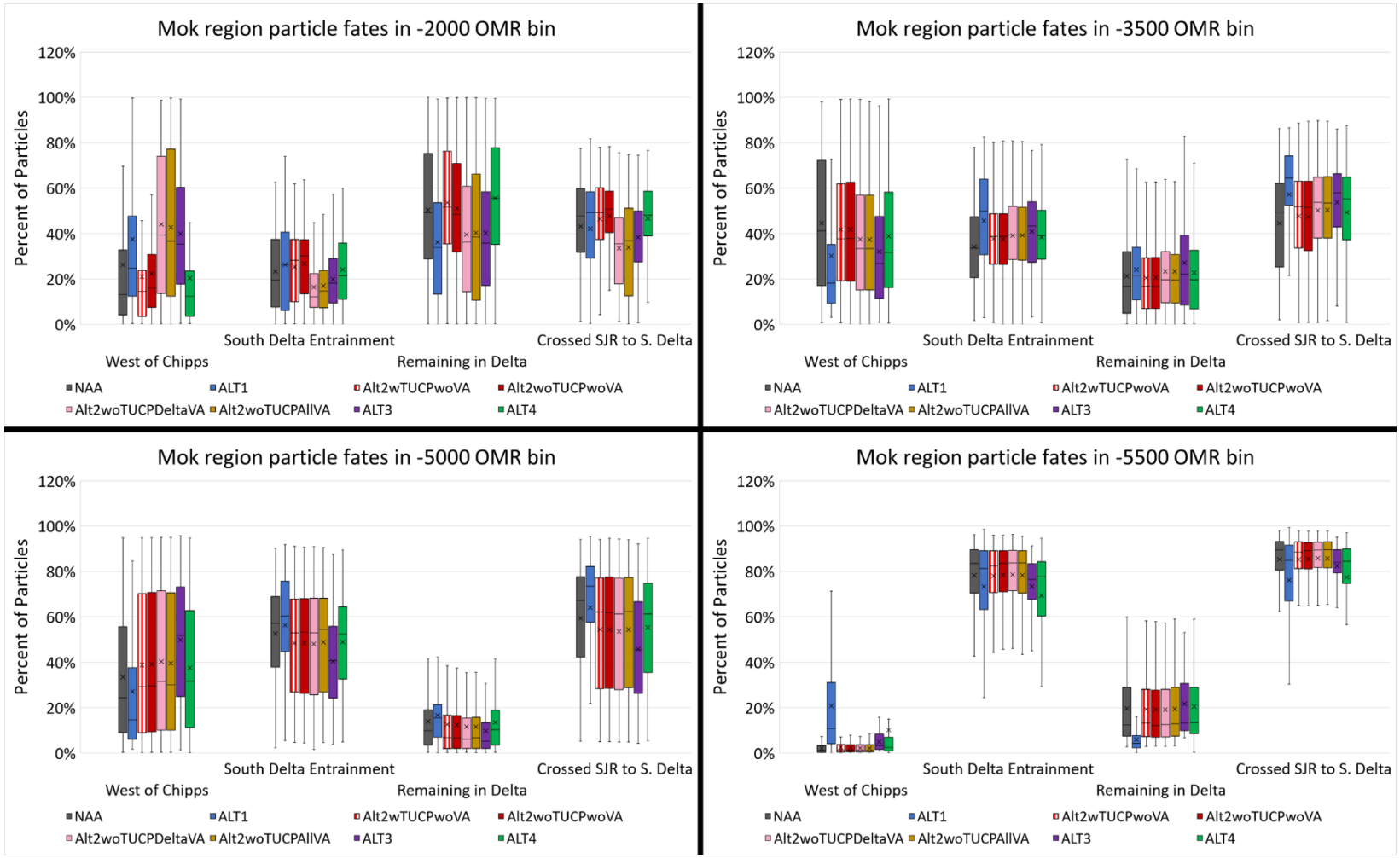

Figure I.8-66. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Mokelumne River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

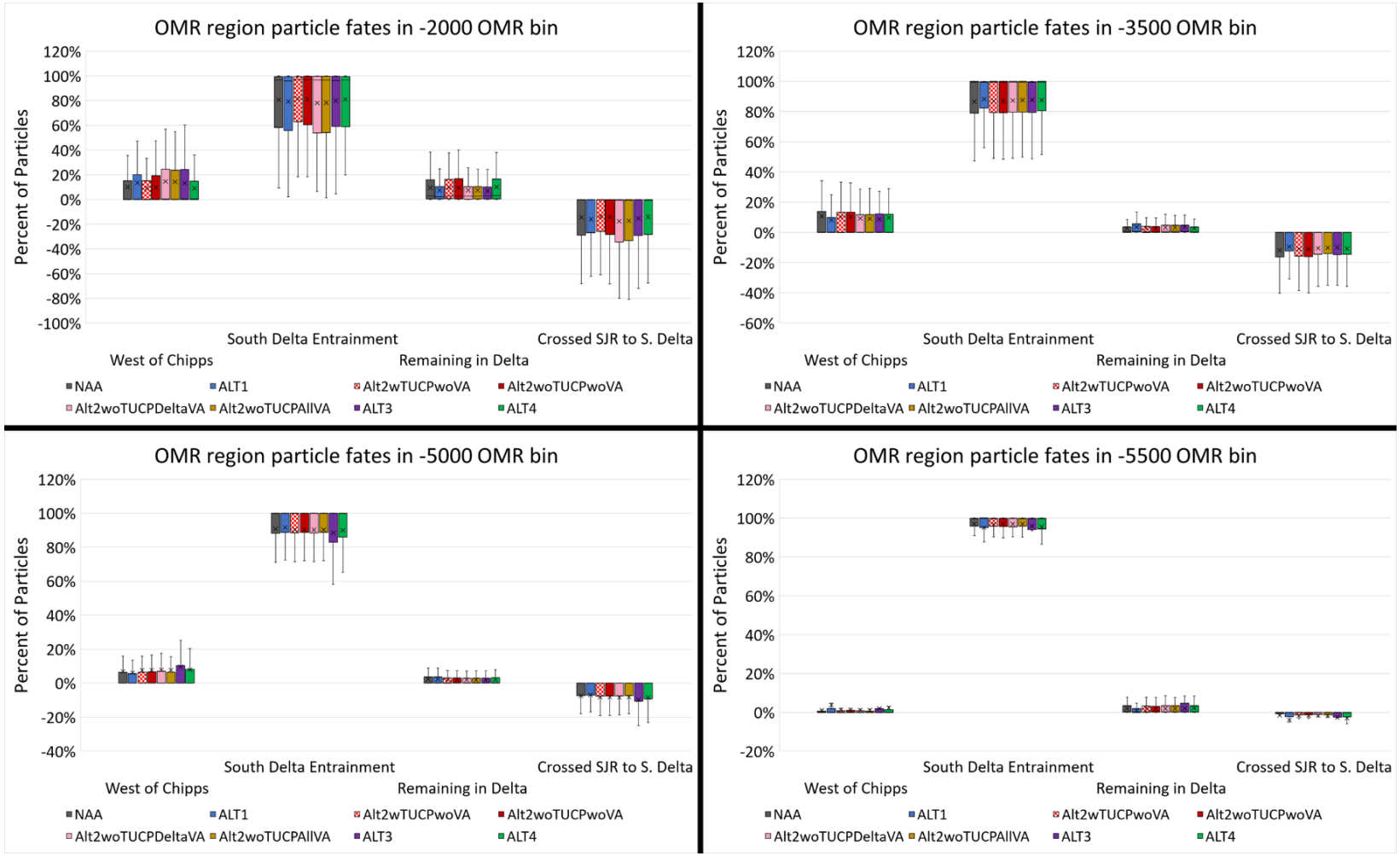

Figure I.8-67. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Old and Middle River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

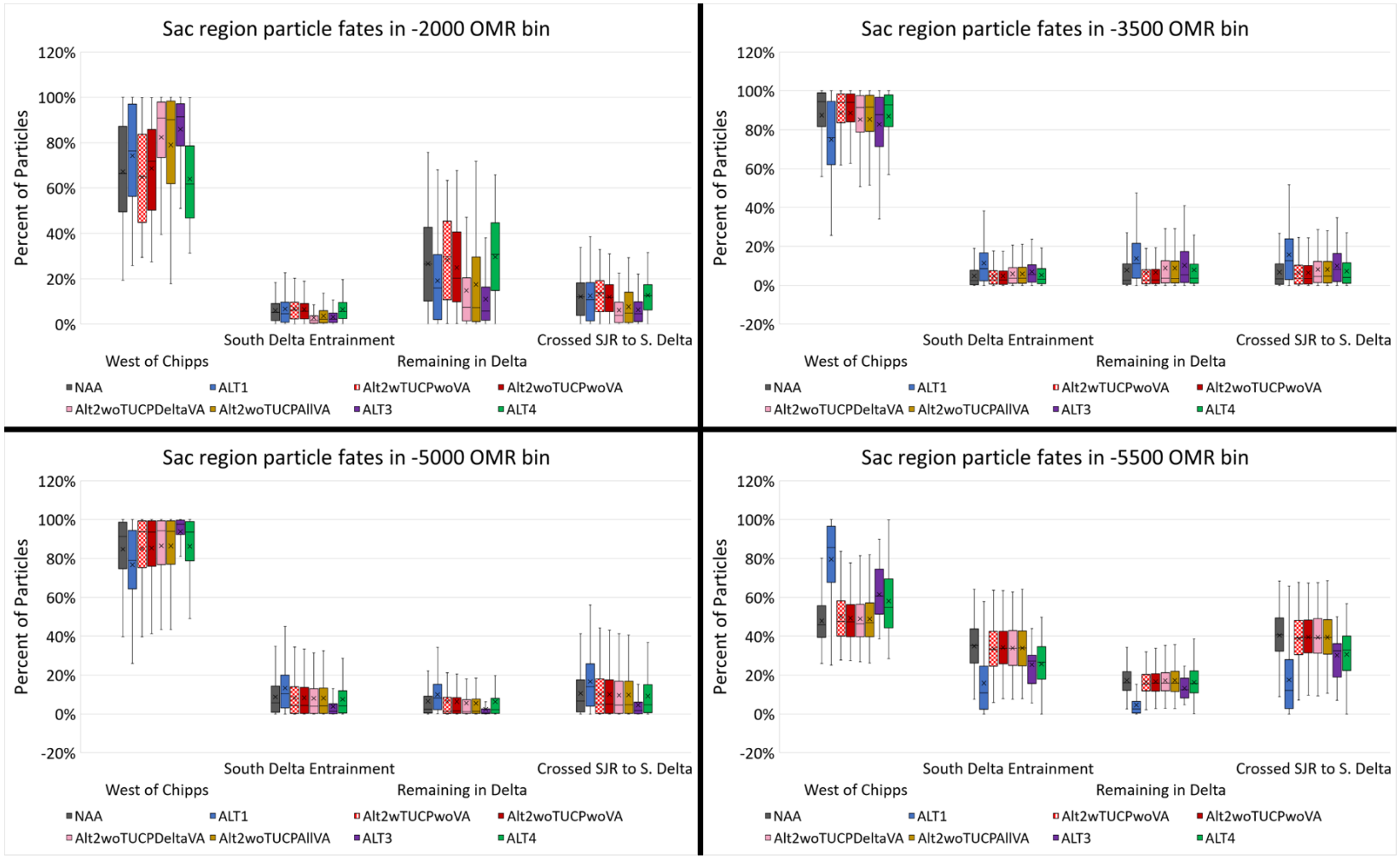

Figure I.8-68. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Sacramento River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

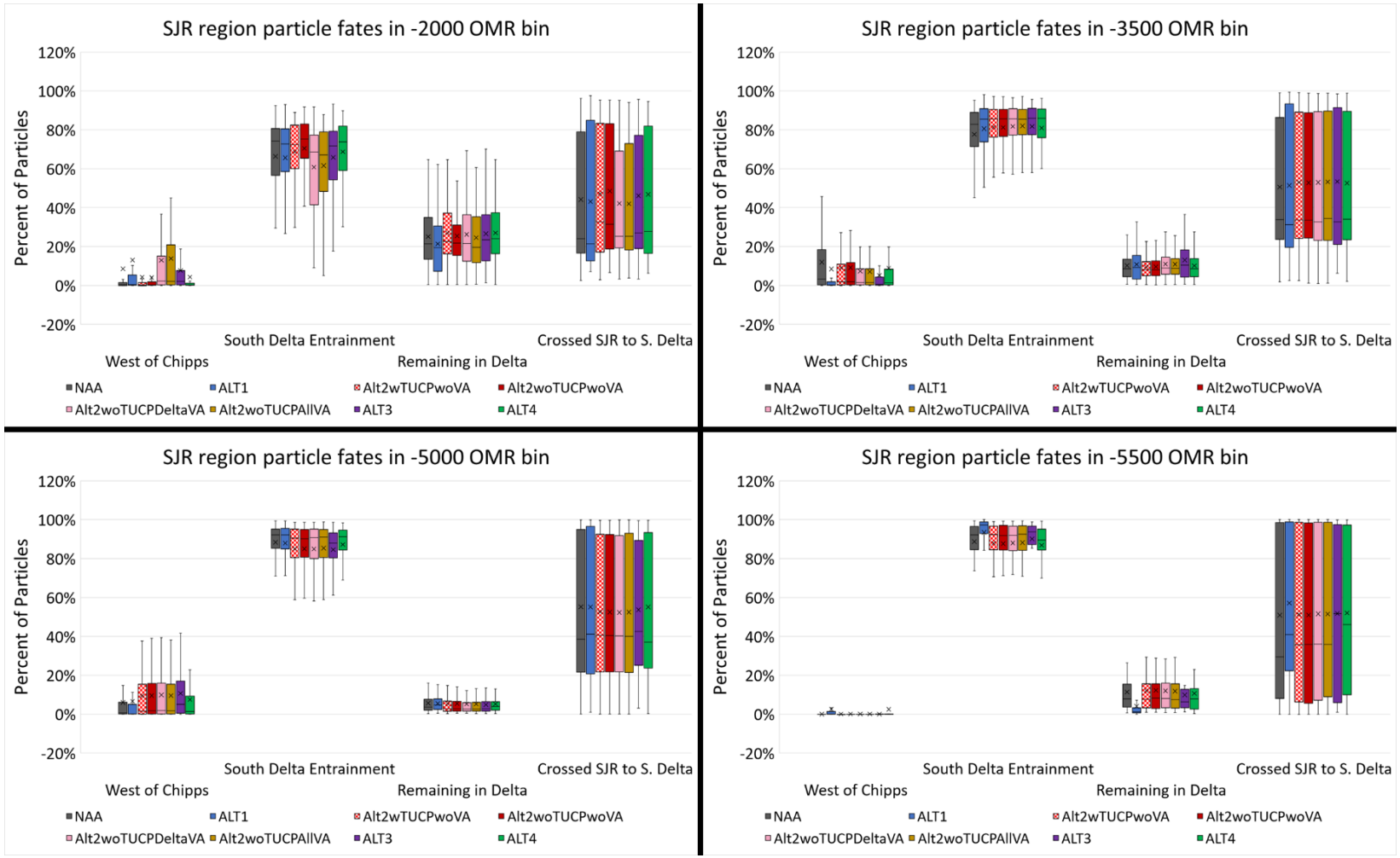

Figure I.8-69. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at San Joaquin River region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

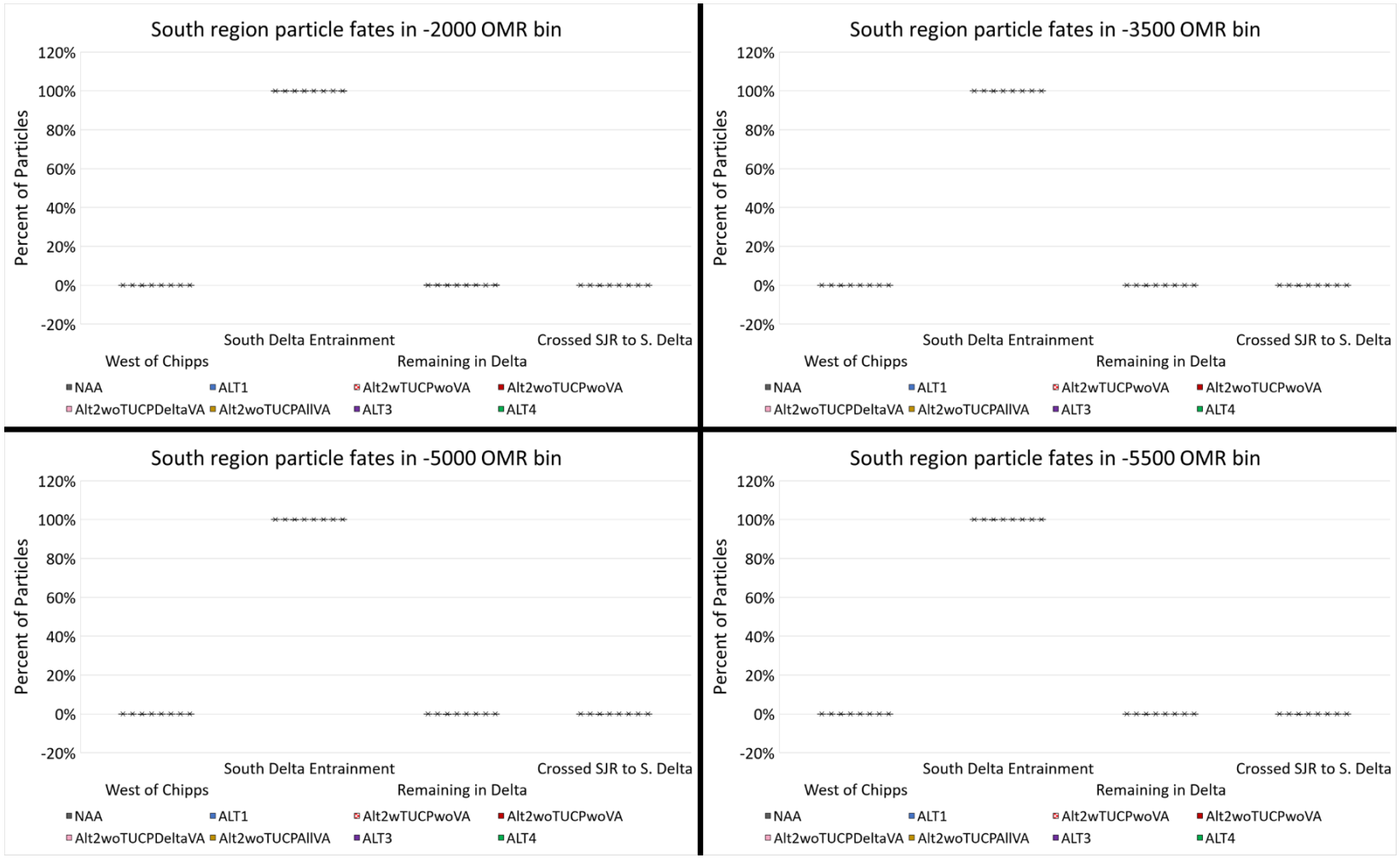

Figure I.8-70. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at South Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

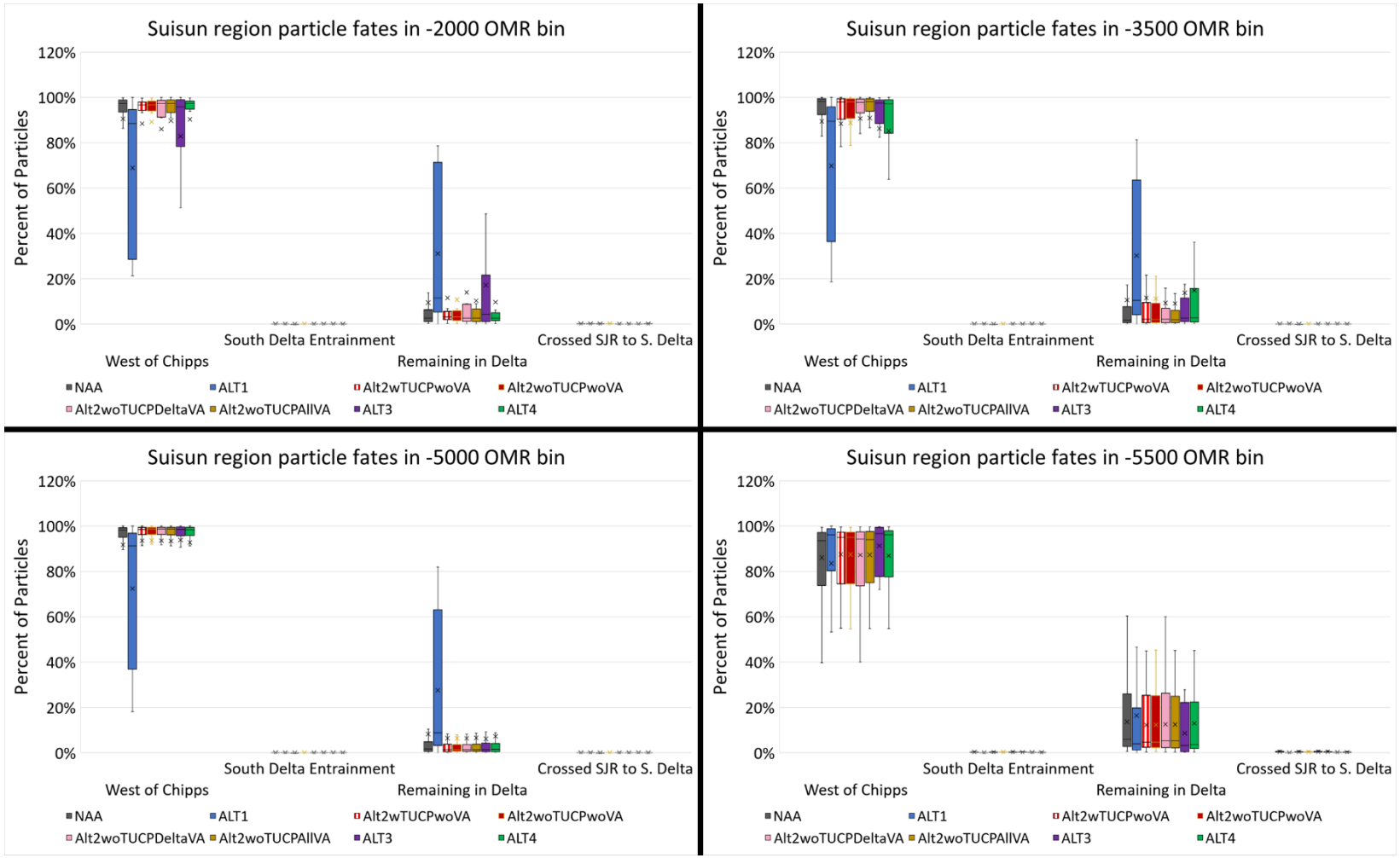

Figure I.8-71. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Suisun region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

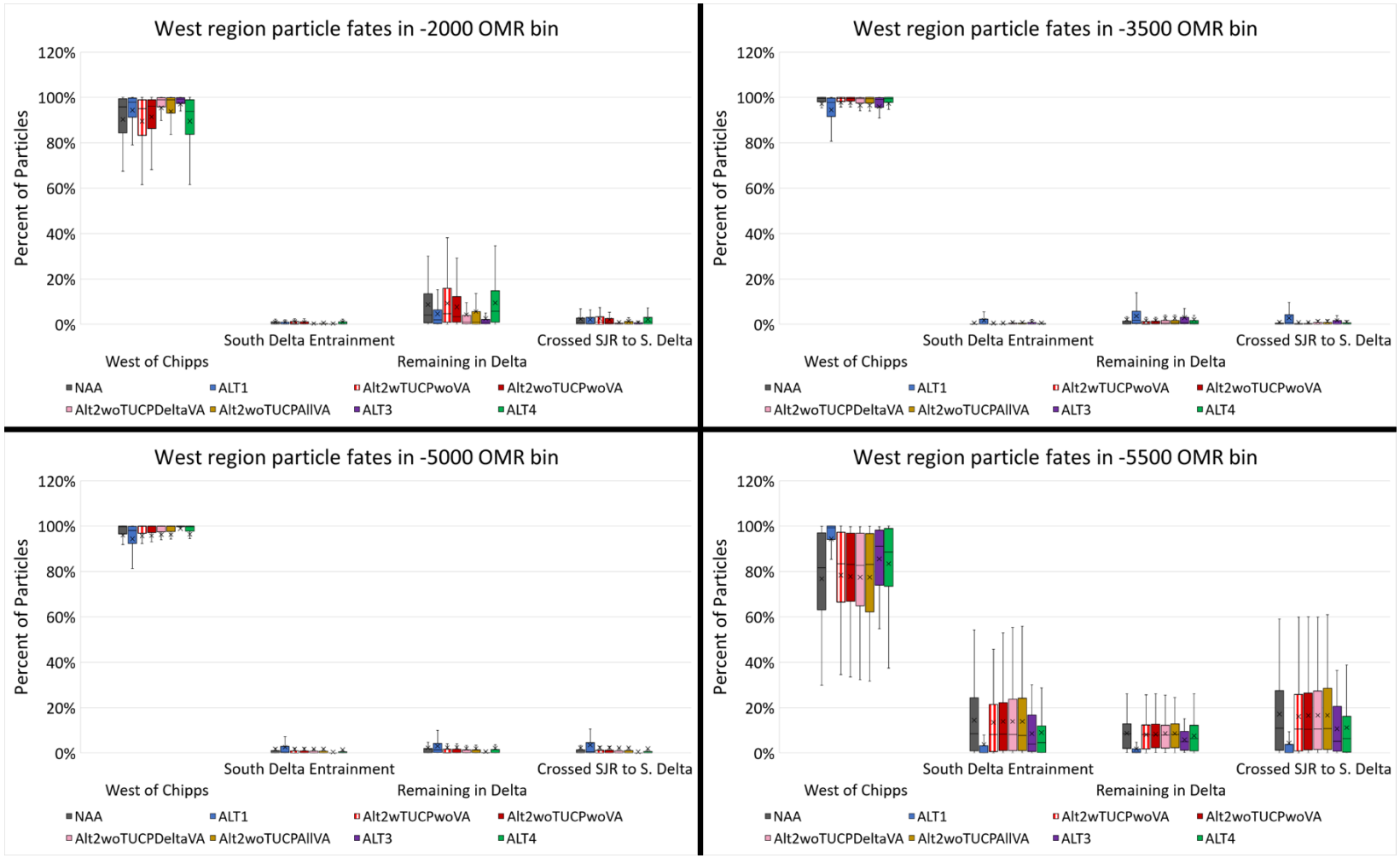

Figure I.8-72. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at West Delta region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

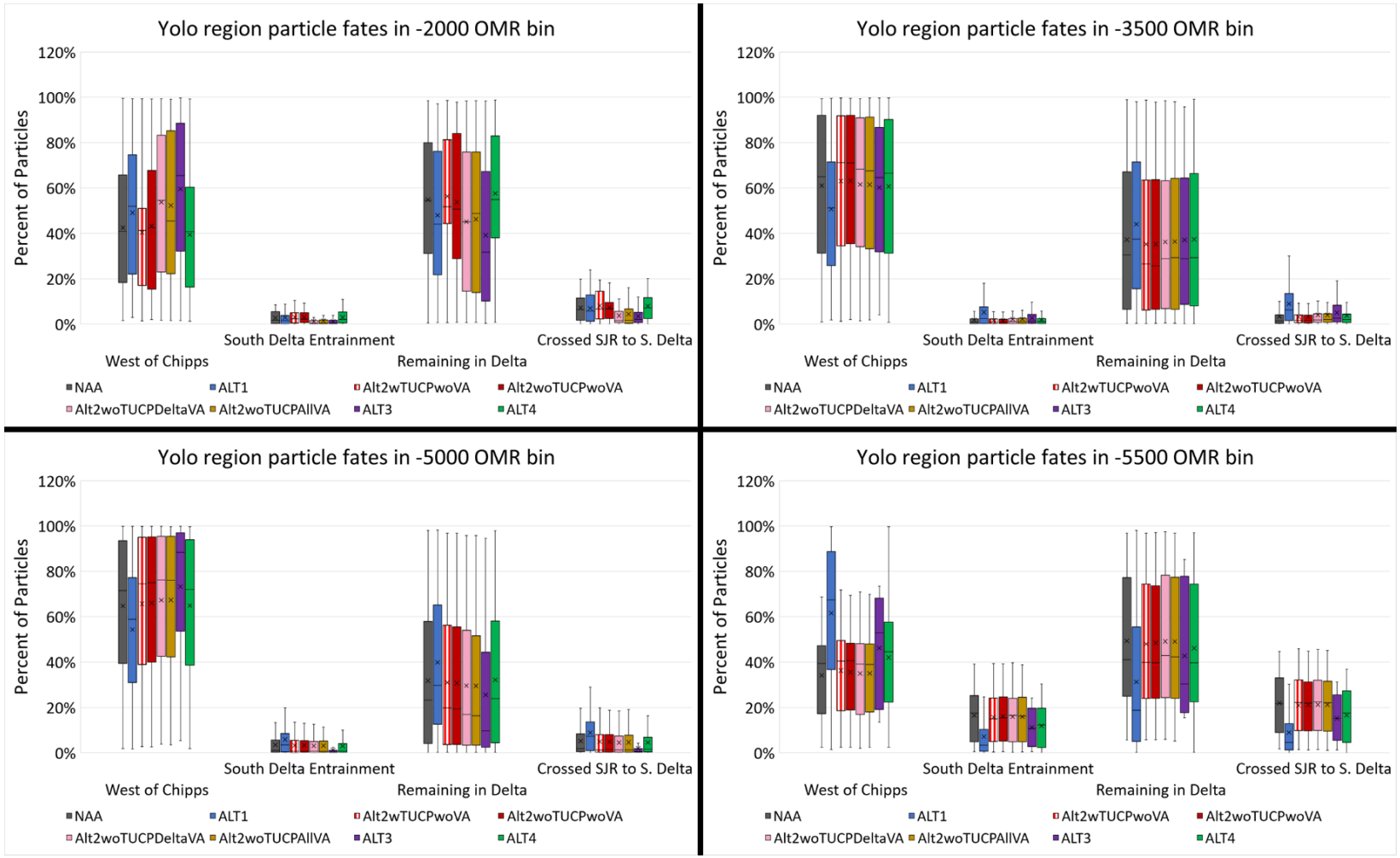

Figure I.8-73. Box and whisker plot of mean December through March particle fate after 45 days by exit location (within each facet from left to right: West of Chipps, South Delta Entrainment, Remaining in Delta, Crossed SJR to S. Delta) for surface oriented particles injected at Yolo region by OMR Bin (from top left to bottom right: -2,000 cfs, -3,500 cfs, -5,000 cfs, -5,500 cfs) for the No Action Alternative, Alternative 1, four phases of Alternative 2, Alternative 3, and Alternative 4.

I.8.5 References

Miller, A. 2002. *Methodology for Flow and Salinity Estimates in the Sacramento–San Joaquin Delta and Suisun Marsh.* Twenty-Second Annual Progress Report to the State Water Resources Control Board. Chapter 2: Particle Tracking Model Verification and Calibration. Sacramento, CA.

Smith, T. 1998. *Methodology for Flow and Salinity Estimates in the Sacramento–San Joaquin Delta and Suisun Marsh.* Twenty-Second Annual Progress Report to the State Water Resources Control Board. Chapter 4: DSM2-PTM. Sacramento, CA.

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