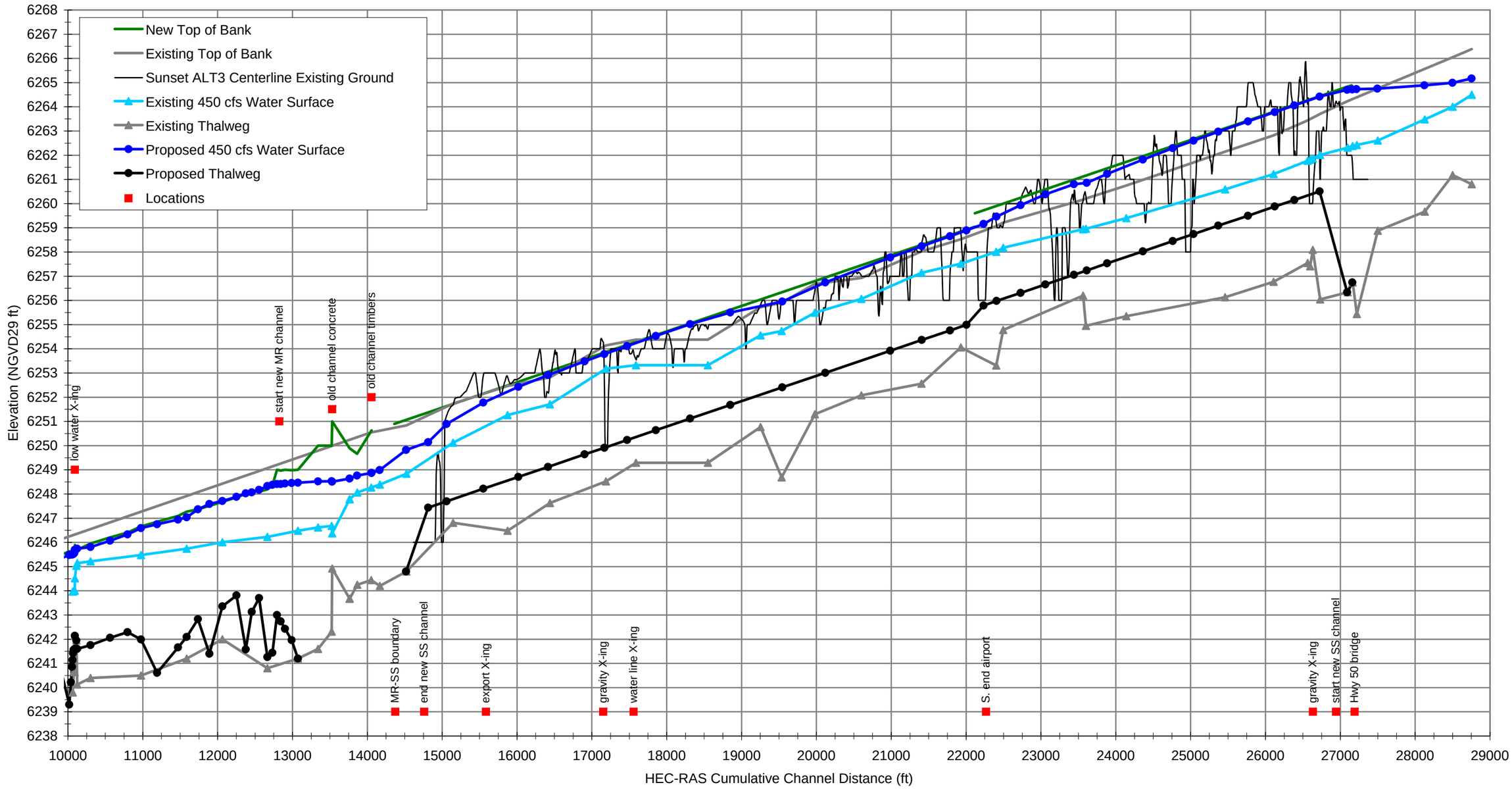
APPENDIX C

Hydraulic Modeling Figures

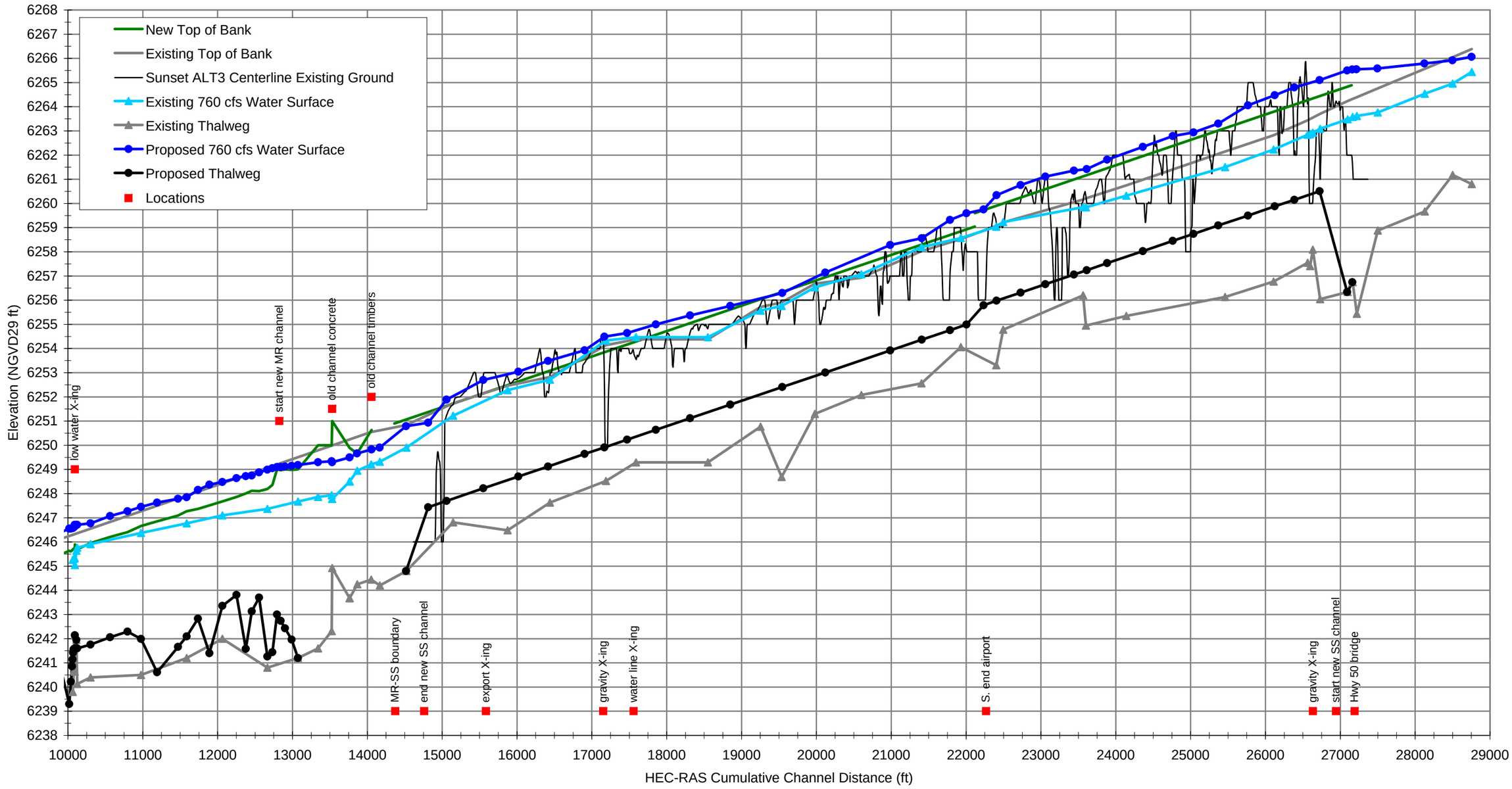
Reproduced from ENTRIX, Inc. 2008
Draft Conceptual Channel Restoration Design and Hydraulic Modeling Report,
prepared for Department of General Services and California Tahoe Conservancy.

Legend
Alternative 3 Cross-Sections
Alternative 3 New Channel Planform
Existing Channel 100 ft River Stations
Sewer Gravity Line
Sewer Export Line
Water Line
Management Planning Area Parcels
12793
12843
12899
12988
13074
12500
13341
13523
13530
13764
13000
13864
14056
14165
13500
14518
14500
14000
15000
14813
15059
15551
15500
16018
16000
16416
16500
16903
17500
17167
17000
18000
17472
17856
18500
18312
19000
18849
19543
19500
20118
20000
20500
20986
21409
21000
21785
22004
22233
21500
22407
22729
23061
22000
23442
22500
23611
23884
23000
24361
23500
24000
25370
24762
24500
25166
25038
25000
26124
25500
26386
26724
26000
27496
27161
27217
27092
27000
26500
28497
28124
28753
27500
28000
ENTRIX
Sunset Stables
Alternative 3 HEC-GeoRAS
Cross-Sections
0
300
600
1,200 Feet
N
W
E
S
Projection: CA State Plane Zone 2
Datum: NAD 83
12/27/07

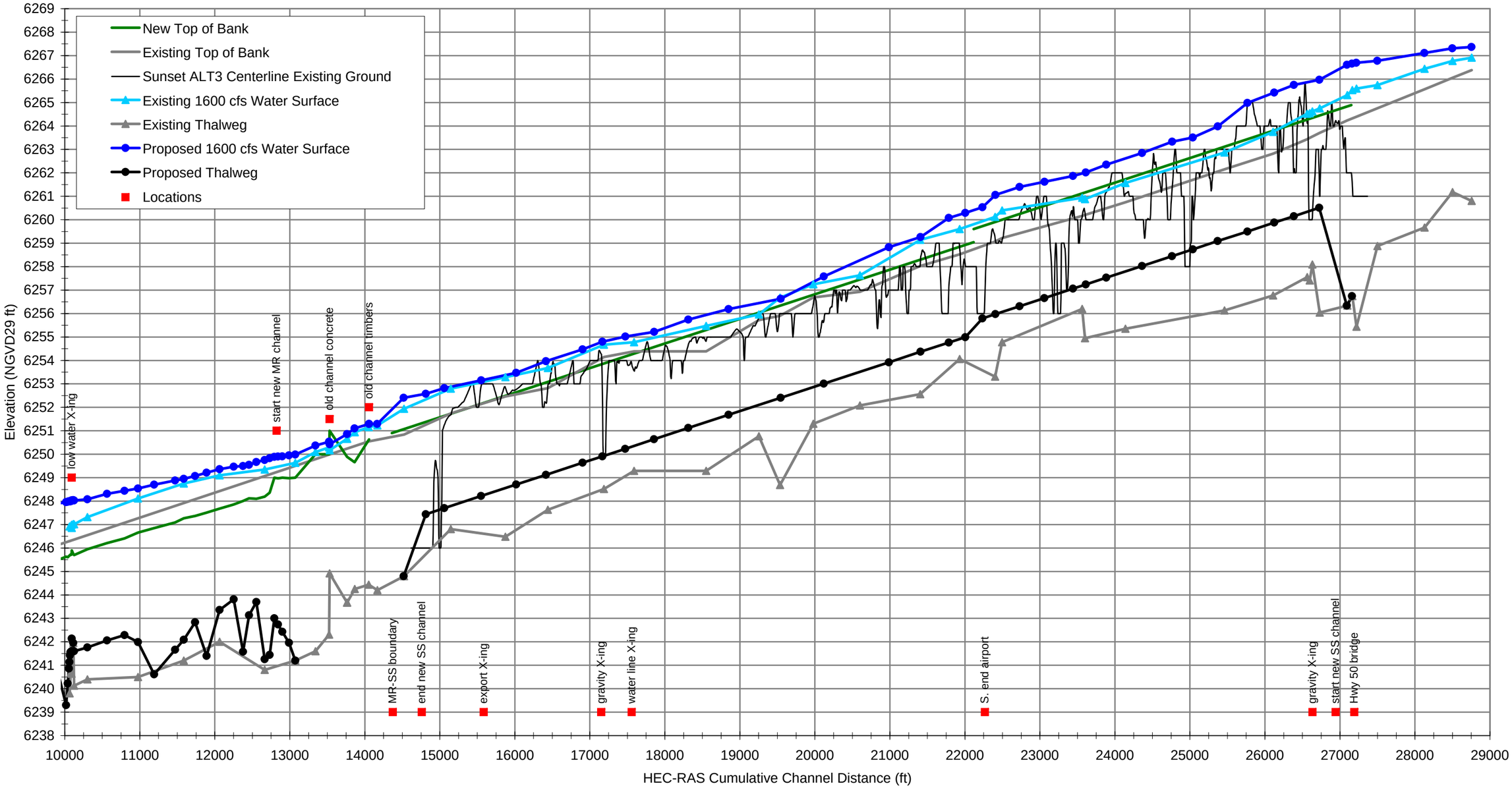
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled 450 cfs Water Surface, Thalweg & Top of Bank Profiles



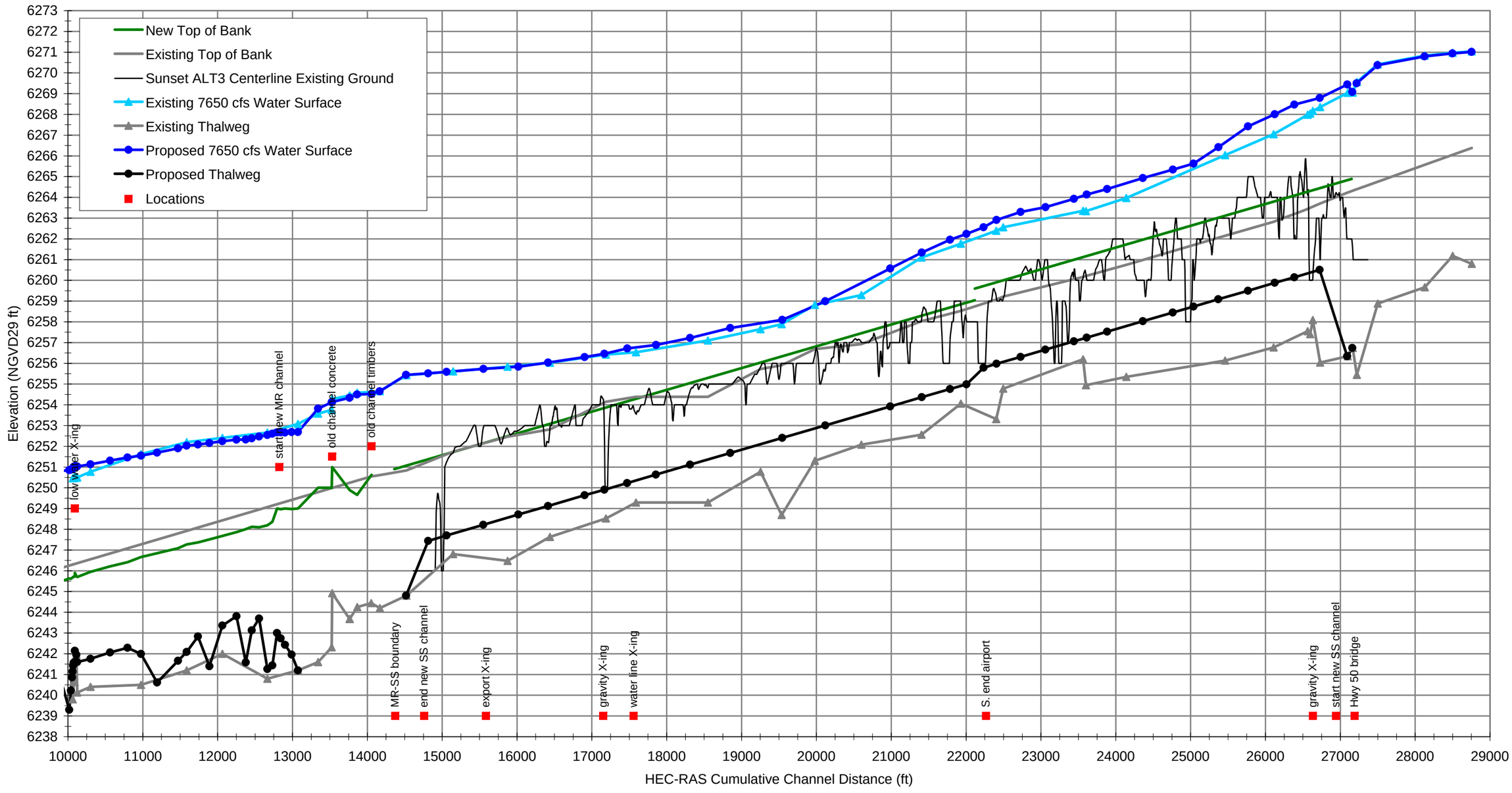
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled 760 cfs Water Surface, Thalweg & Top of Bank Profiles



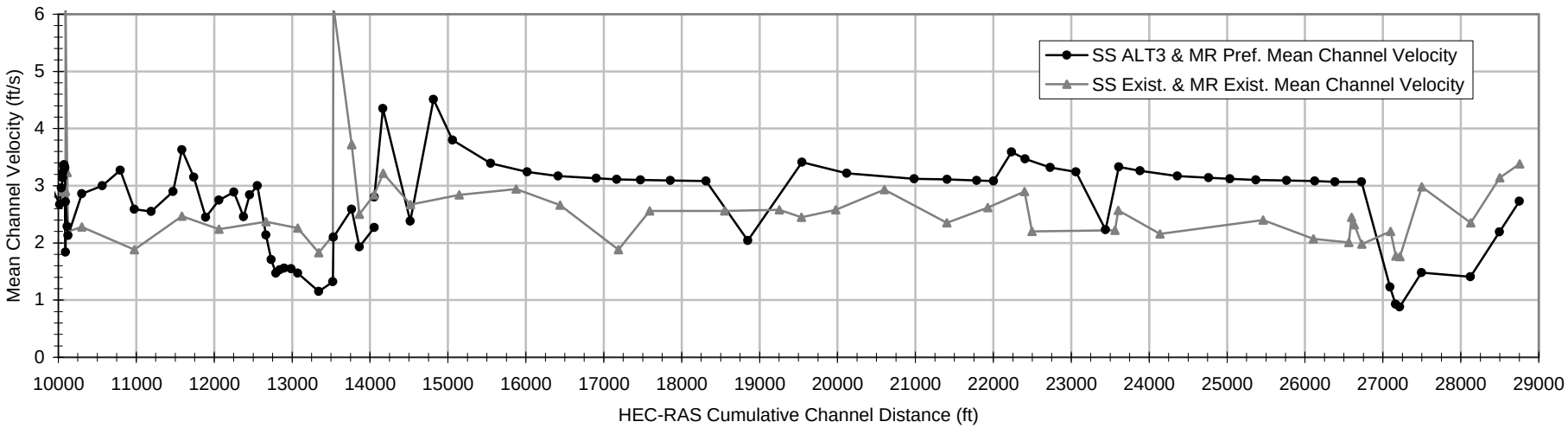
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled 1,600 cfs Water Surface, Thalweg & Top of Bank Profiles



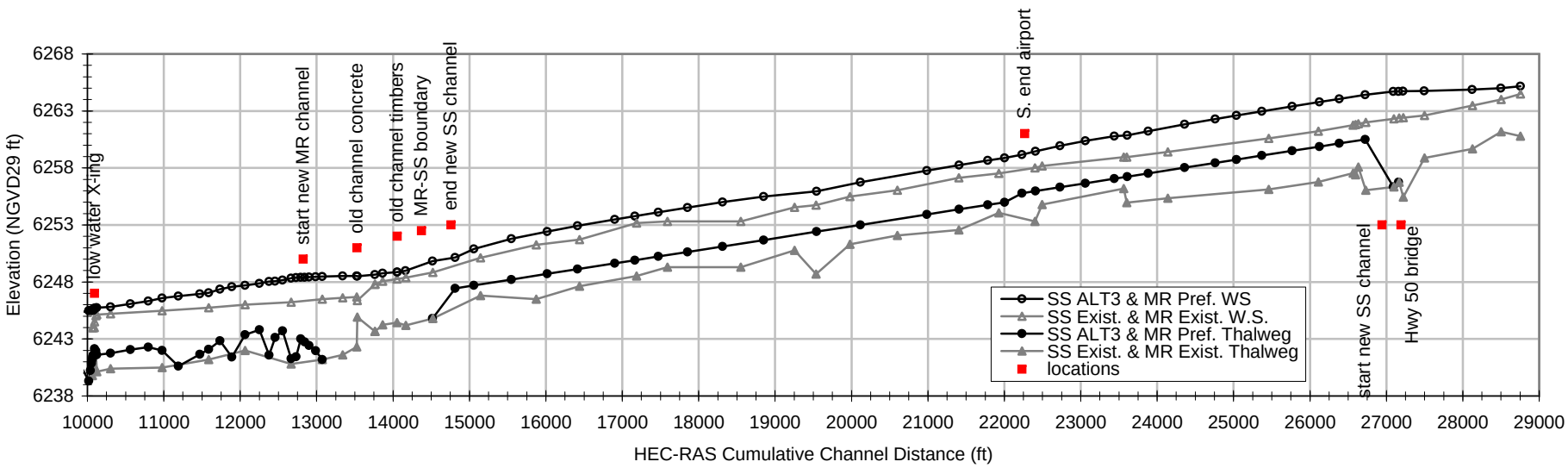
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled 7,650 cfs Water Surface, Thalweg & Top of Bank Profiles



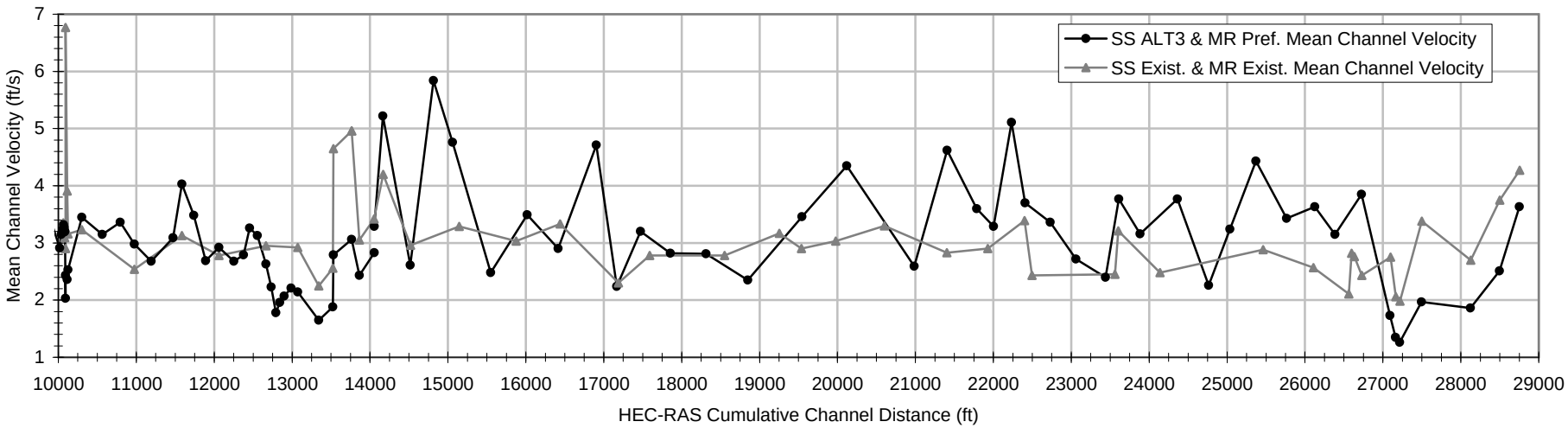
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Mean Channel Velocity - 450 cfs



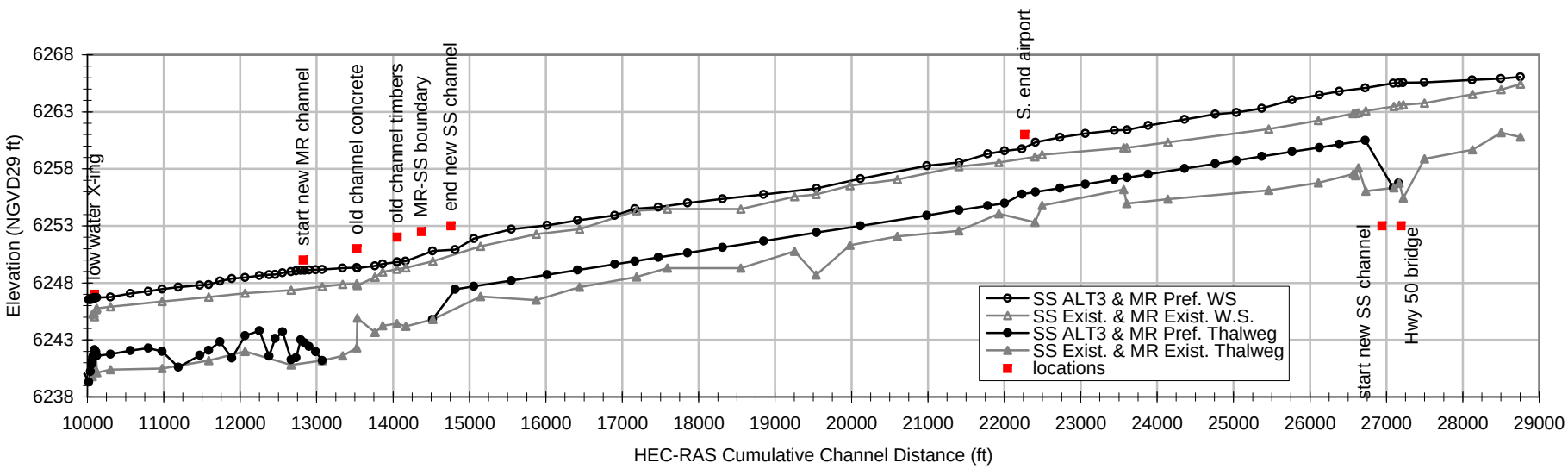
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 450 cfs



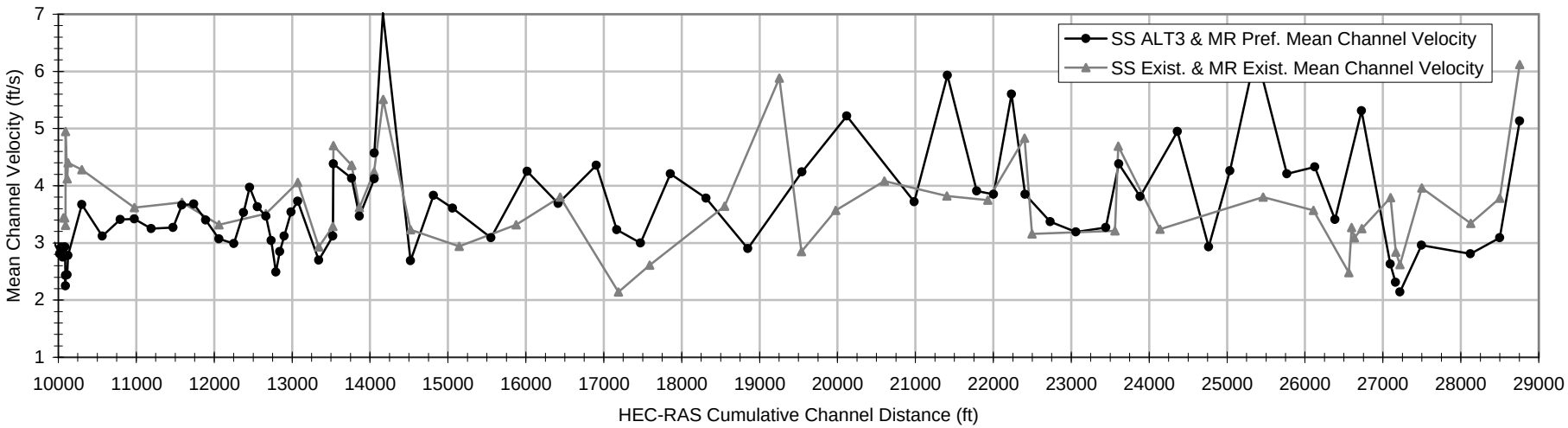
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Mean Channel Velocity - 760 cfs



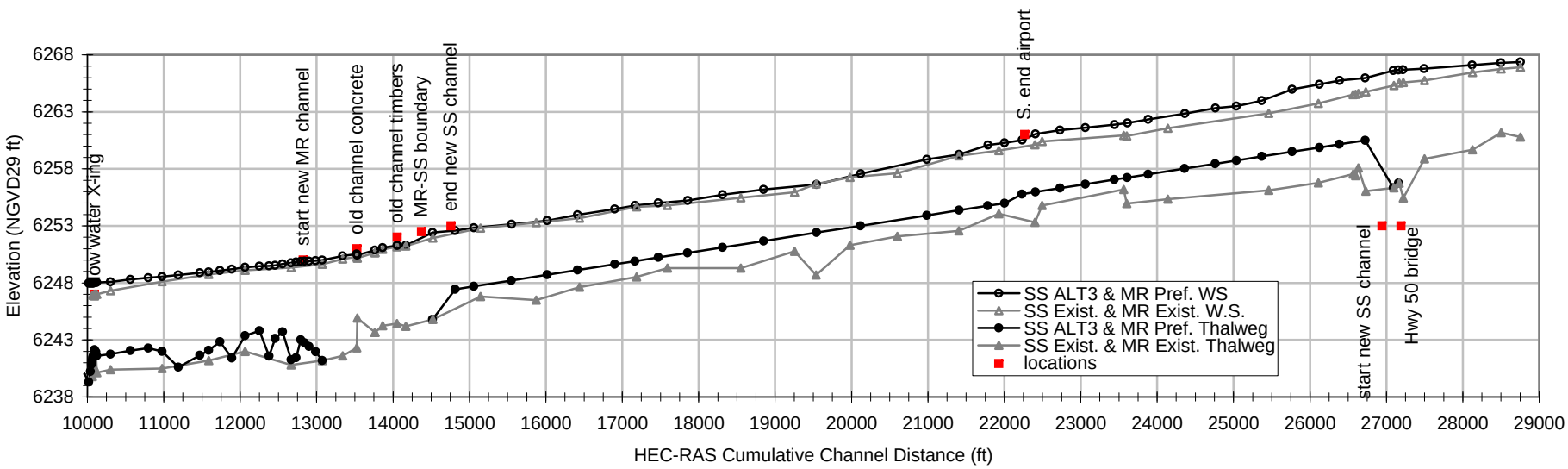
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 760 cfs



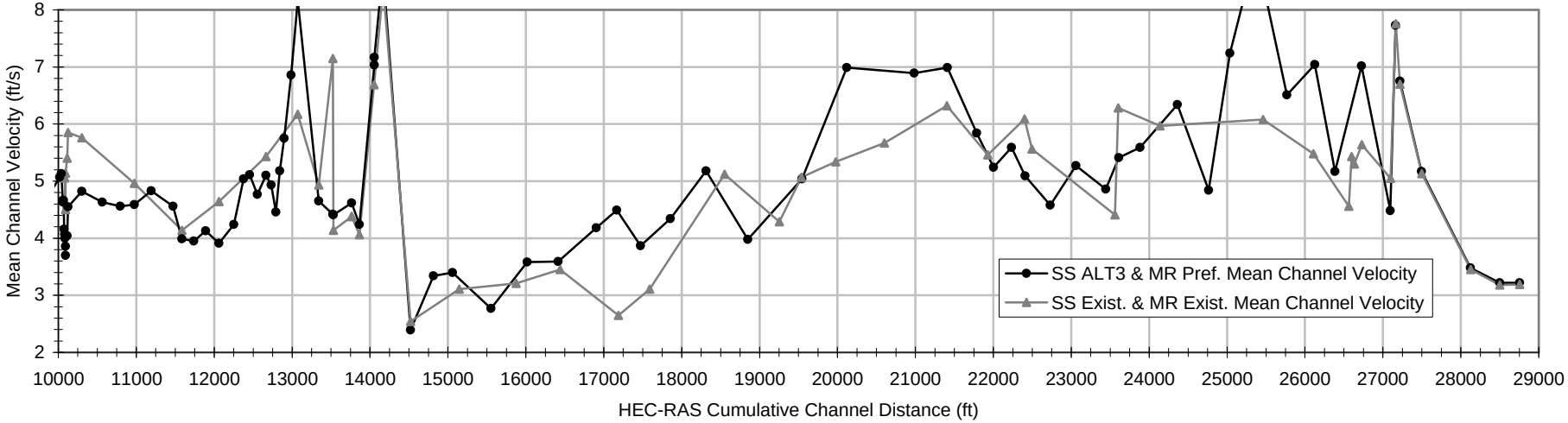
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Mean Channel Velocity - 1,600 cfs



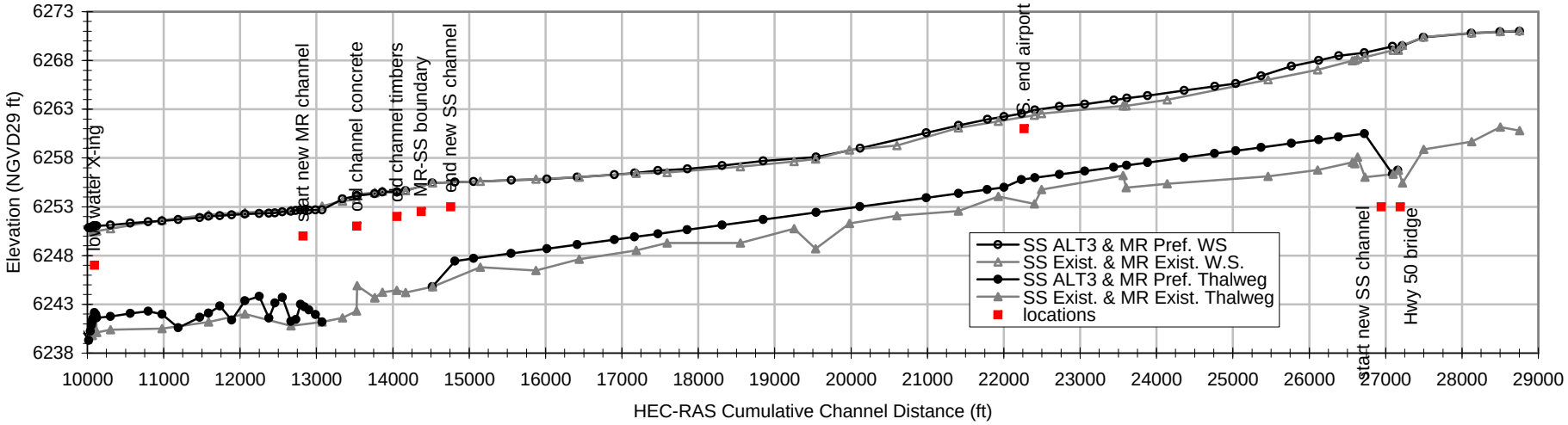
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 1,600 cfs



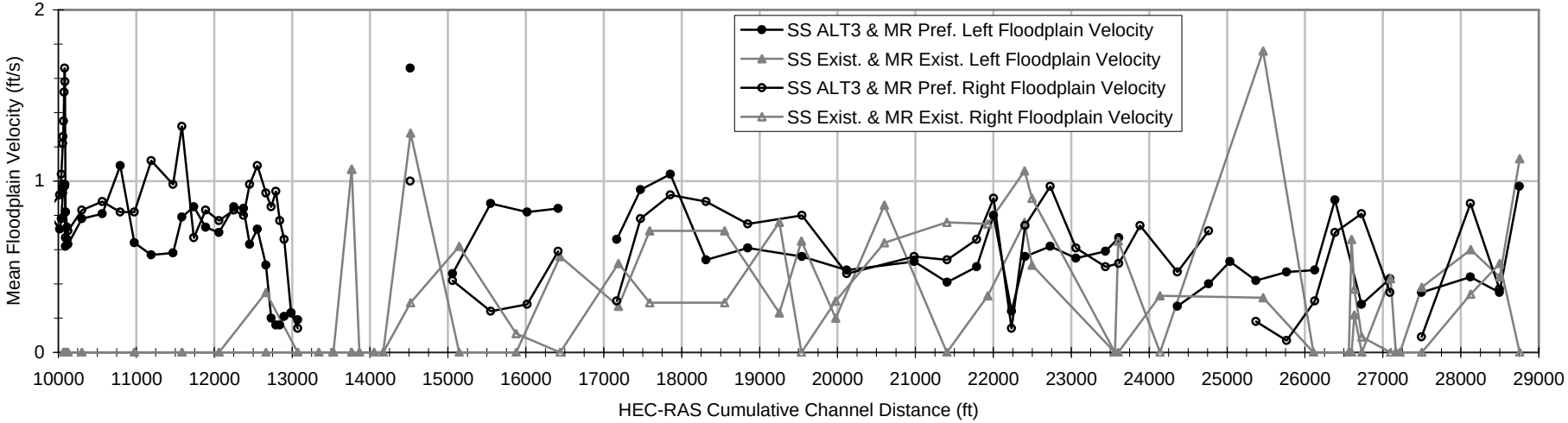
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Mean Channel Velocity - 7,650 cfs



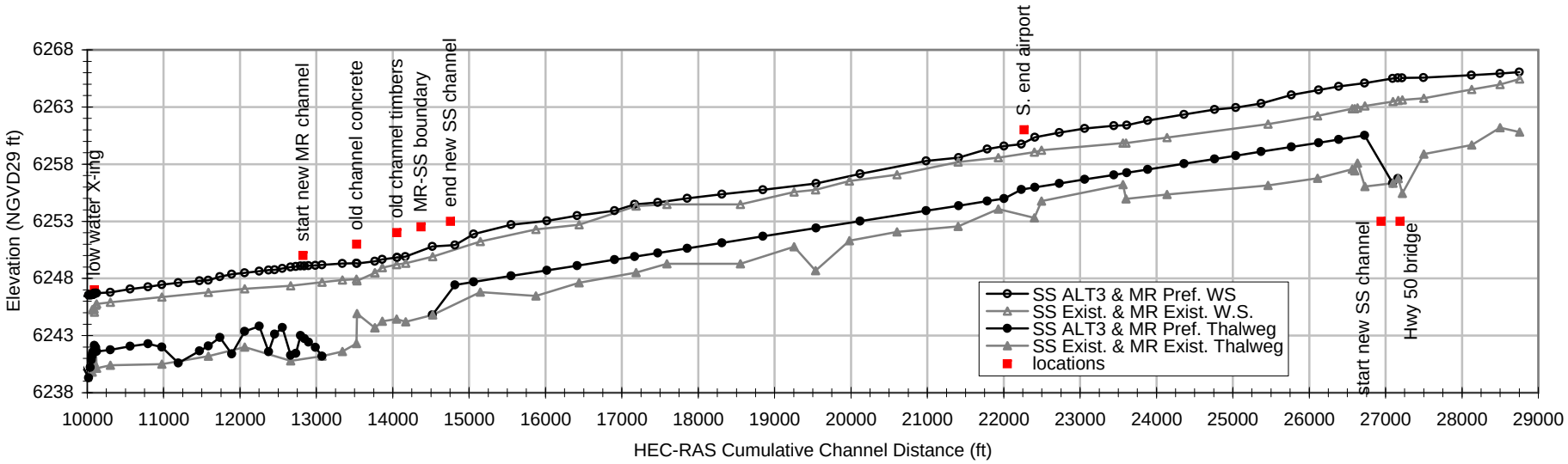
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 7,650 cfs



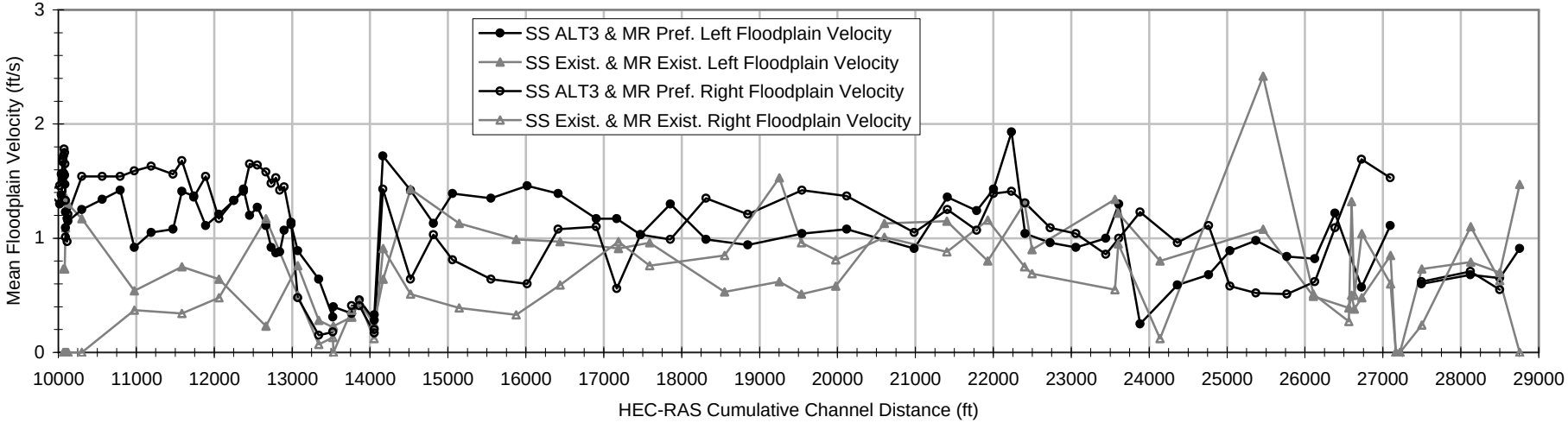
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Mean Floodplain Velocity - 760 cfs



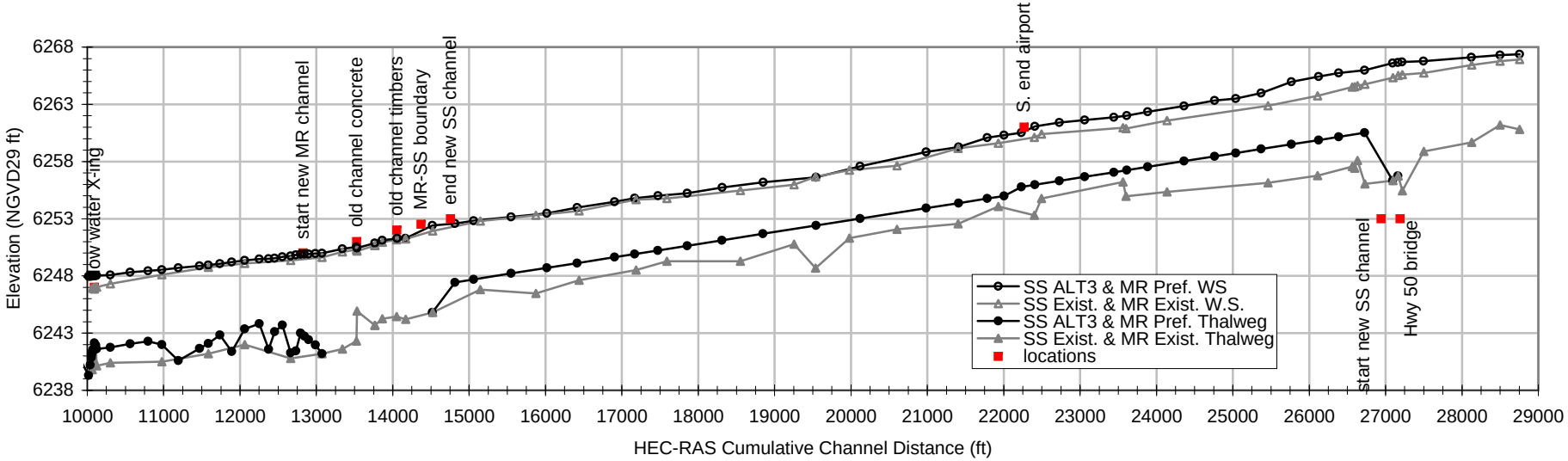
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 760 cfs



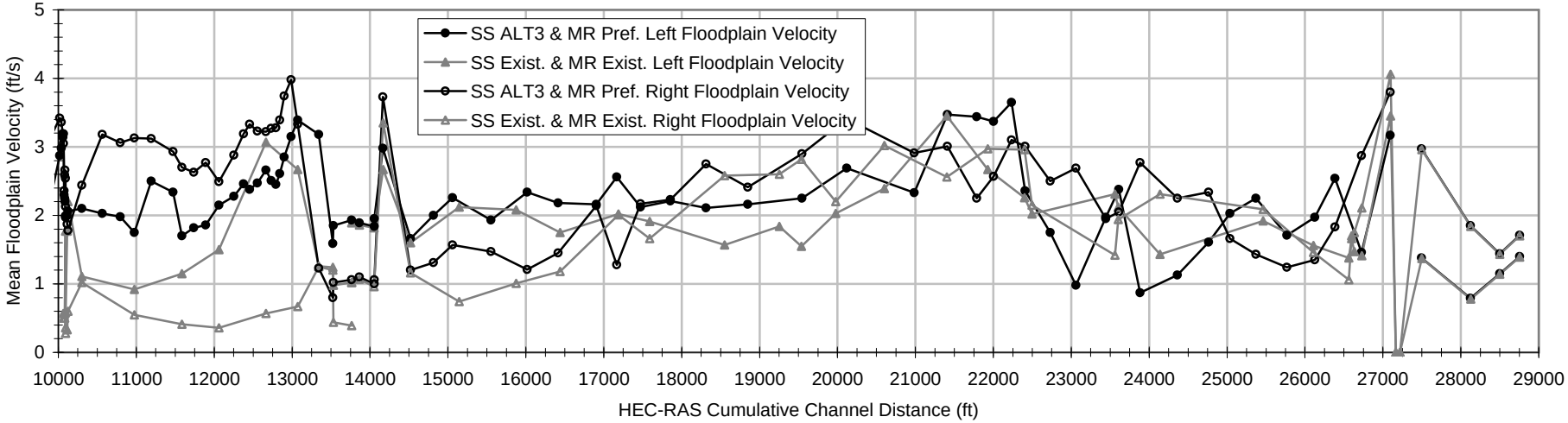
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Mean Floodplain Velocity - 1,600 cfs



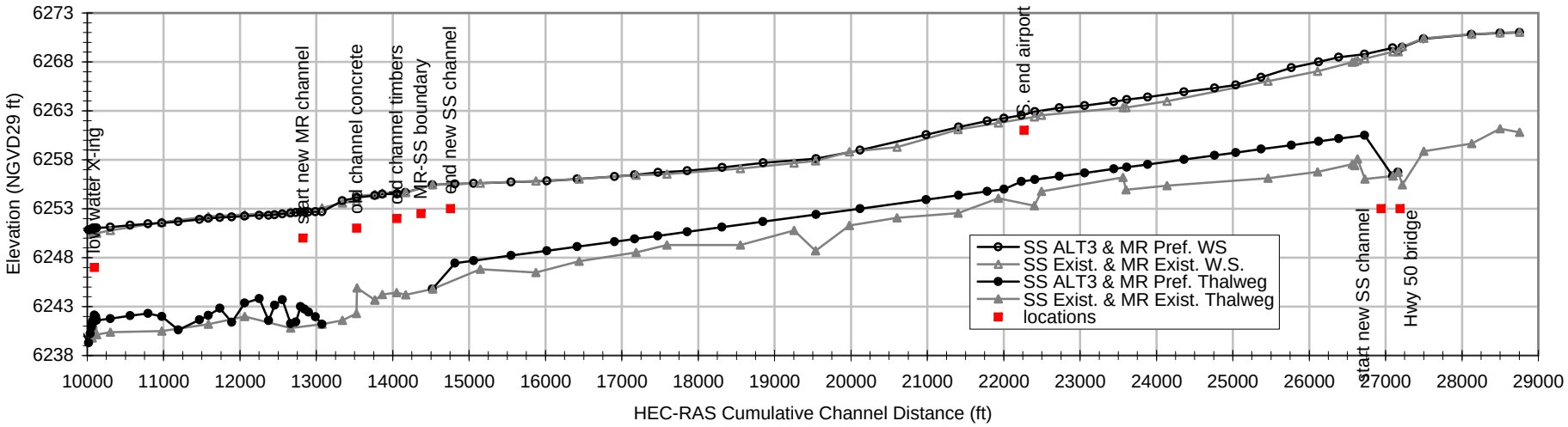
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 1,600 cfs



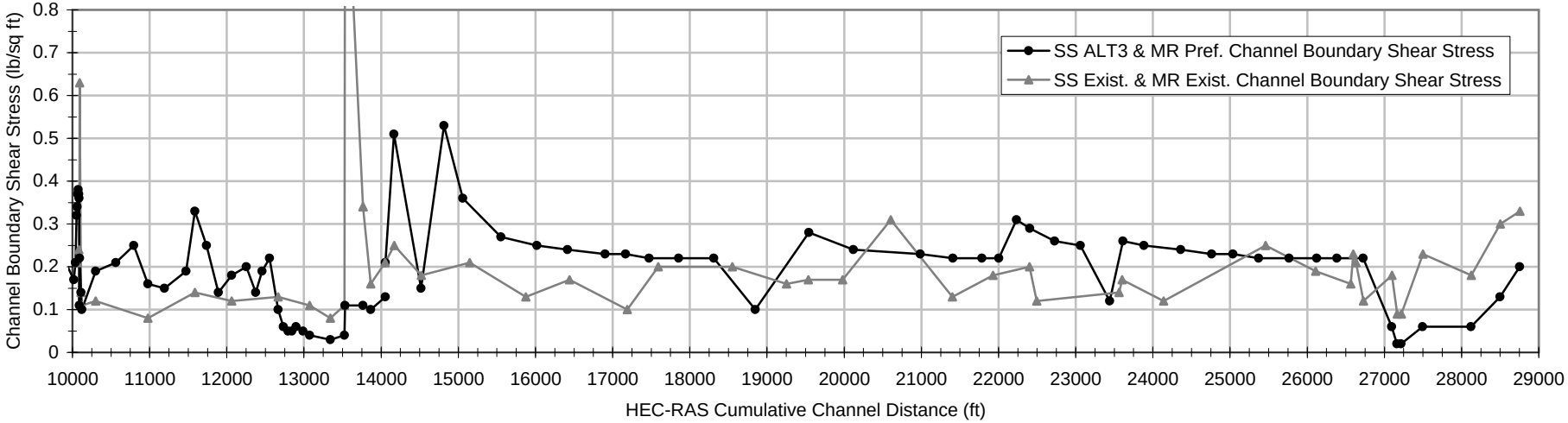
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Mean Floodplain Velocity - 7,650 cfs



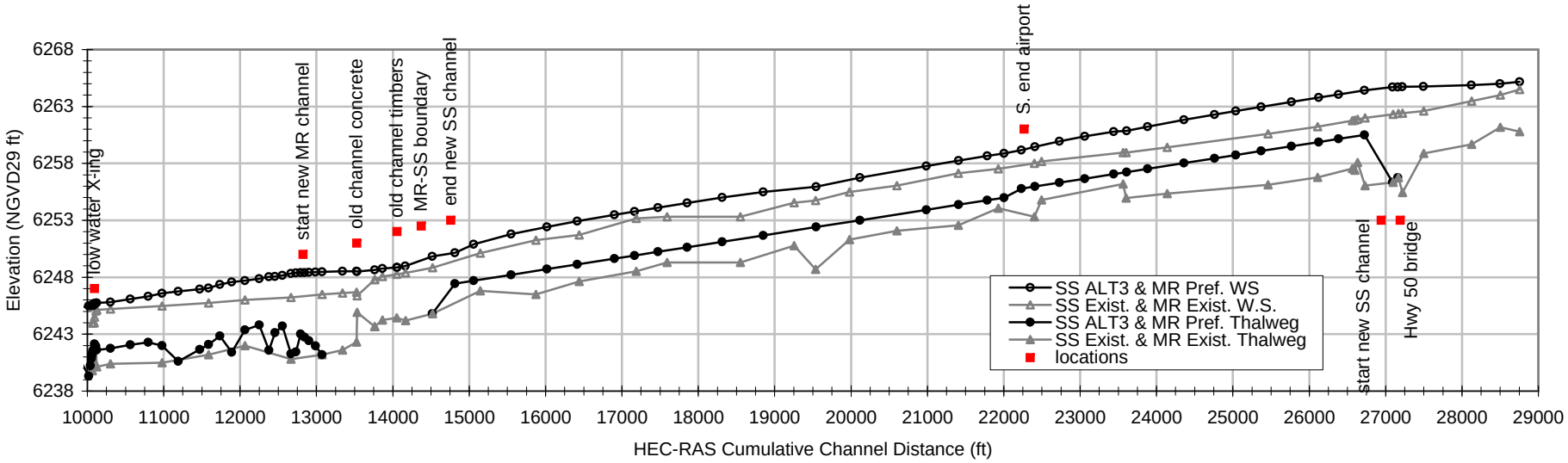
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 7,650 cfs



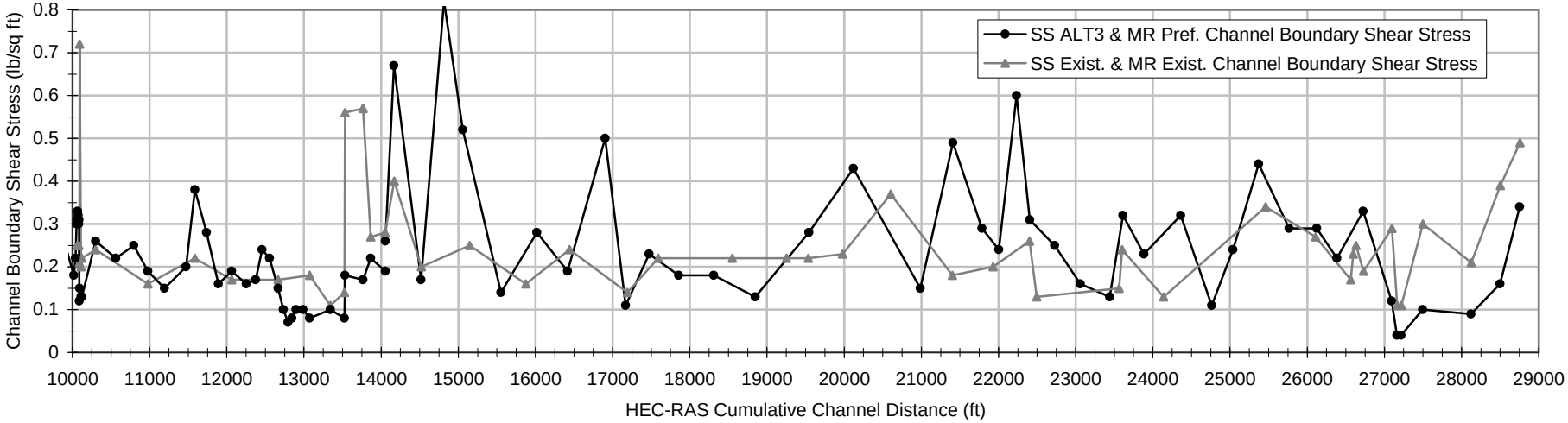
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Channel Boundary Shear Stress - 450 cfs



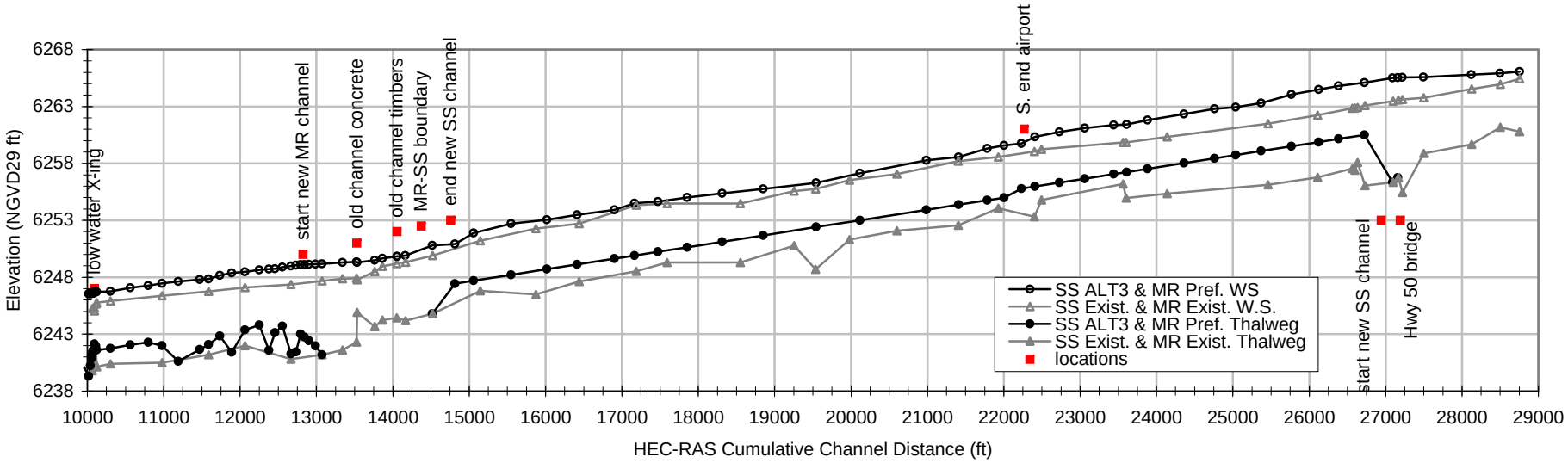
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 450 cfs



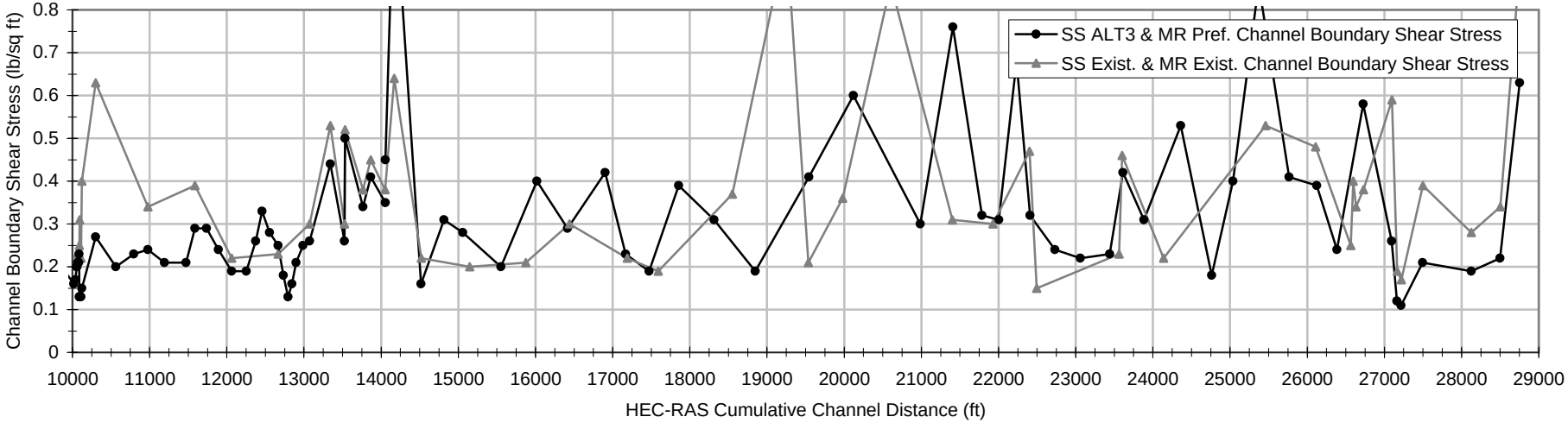
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Channel Boundary Shear Stress - 760 cfs



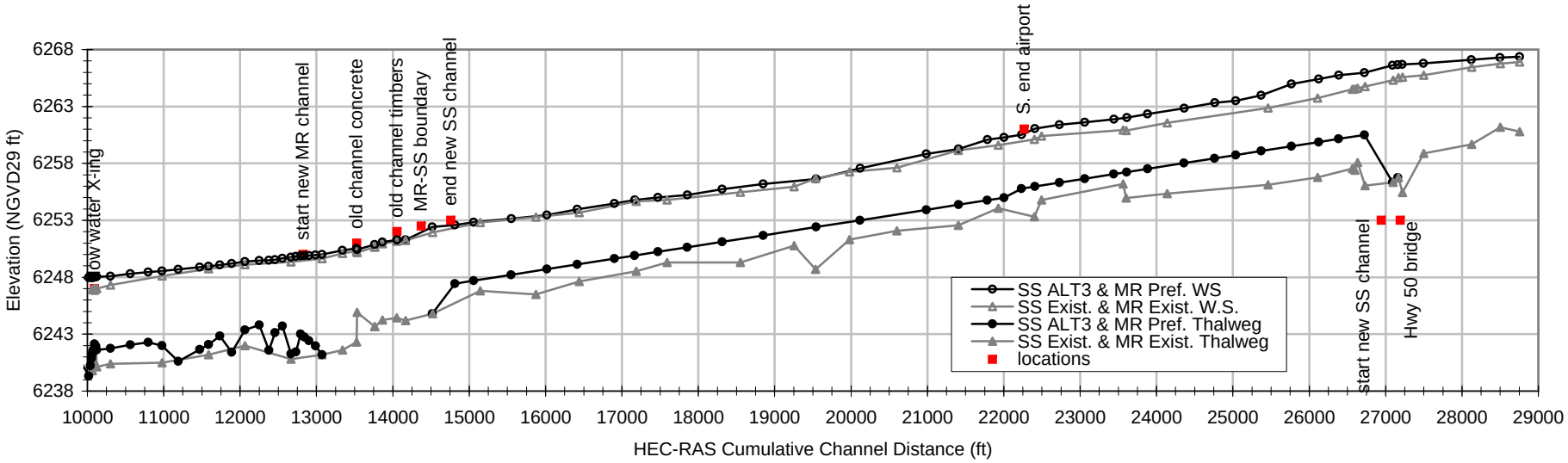
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 760 cfs



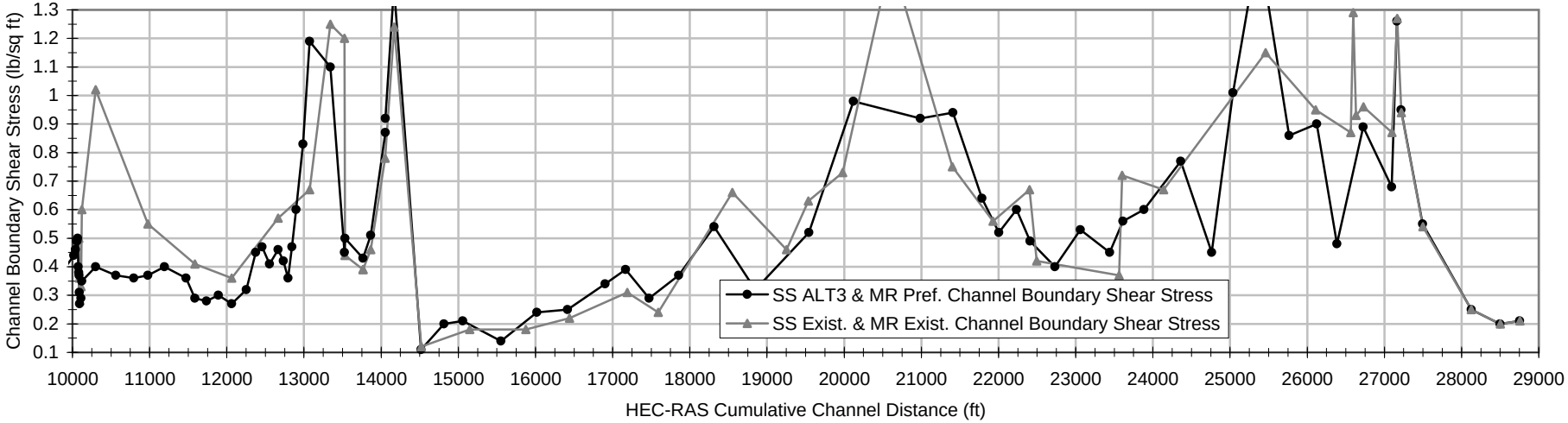
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Channel Boundary Shear Stress - 1,600 cfs



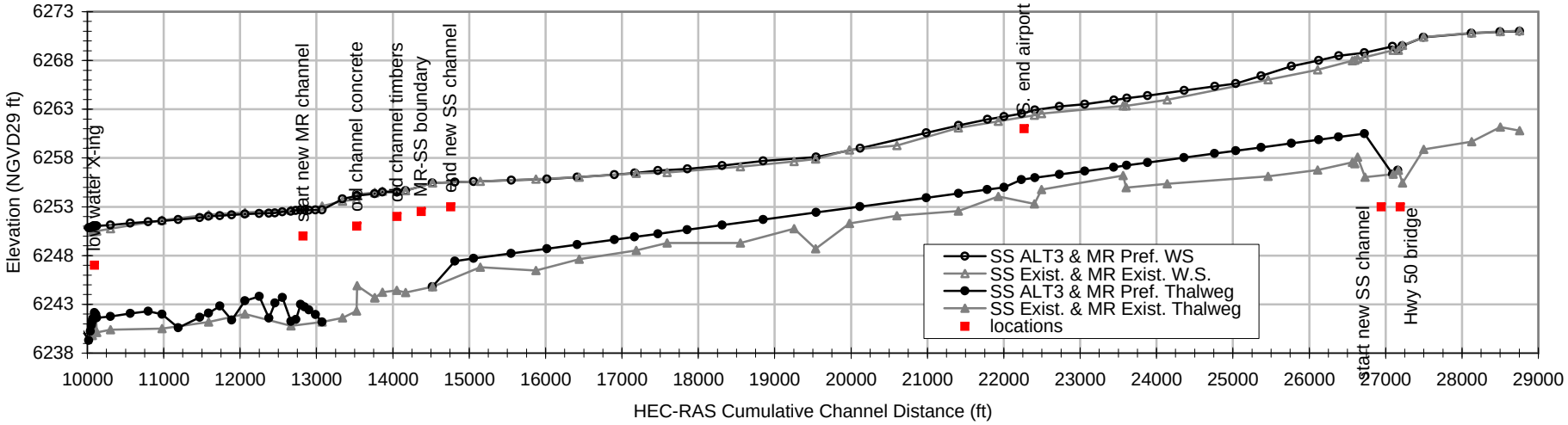
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 1,600 cfs



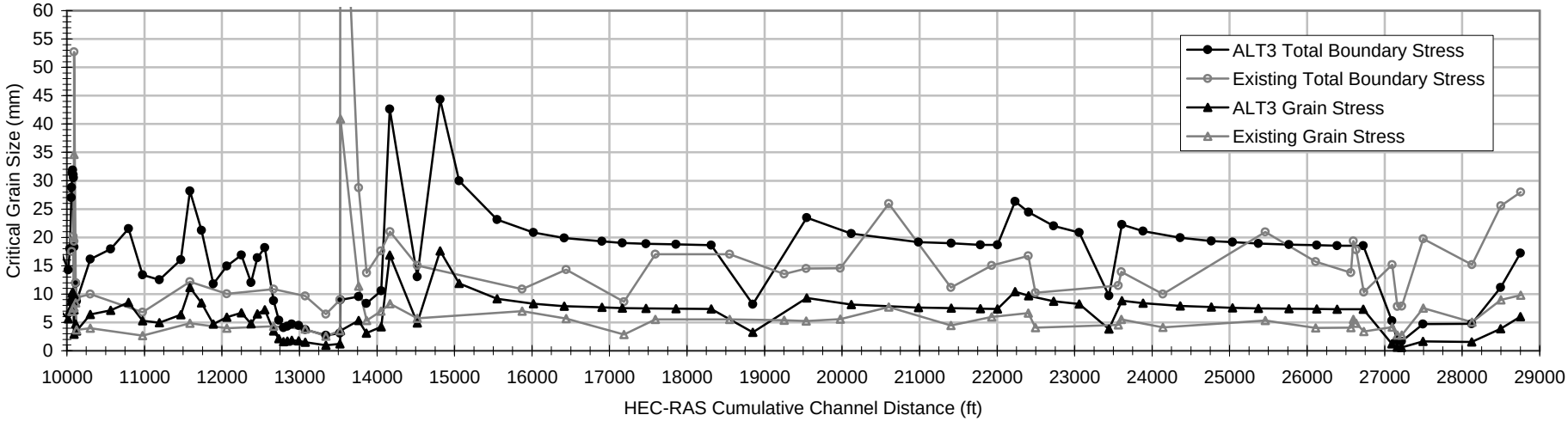
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Channel Boundary Shear Stress - 7,650 cfs



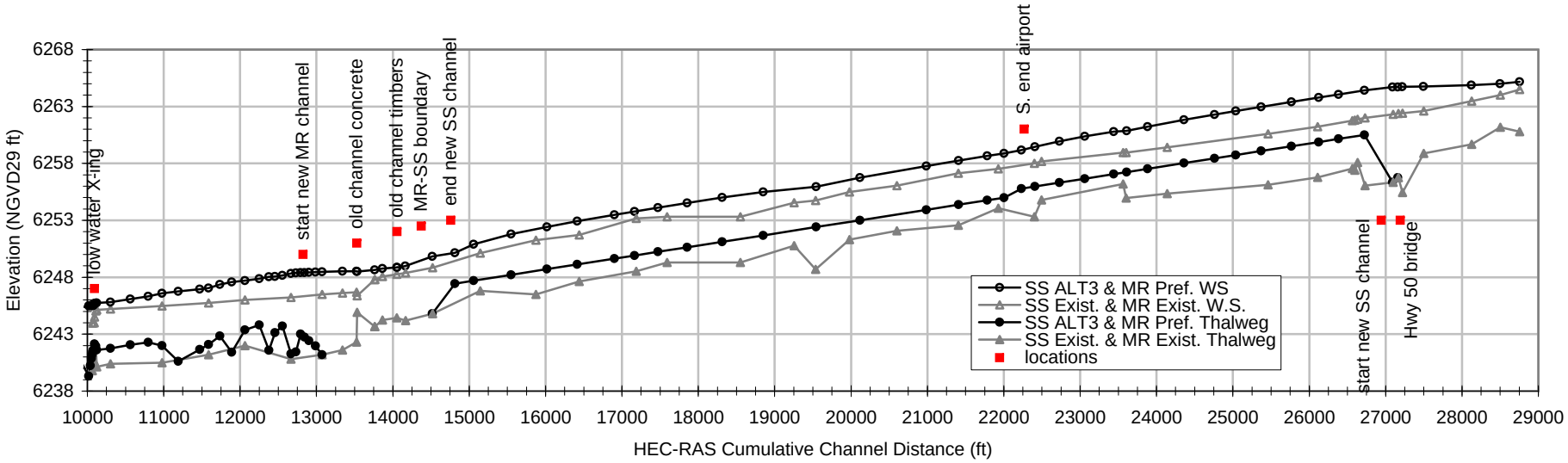
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 7,650 cfs

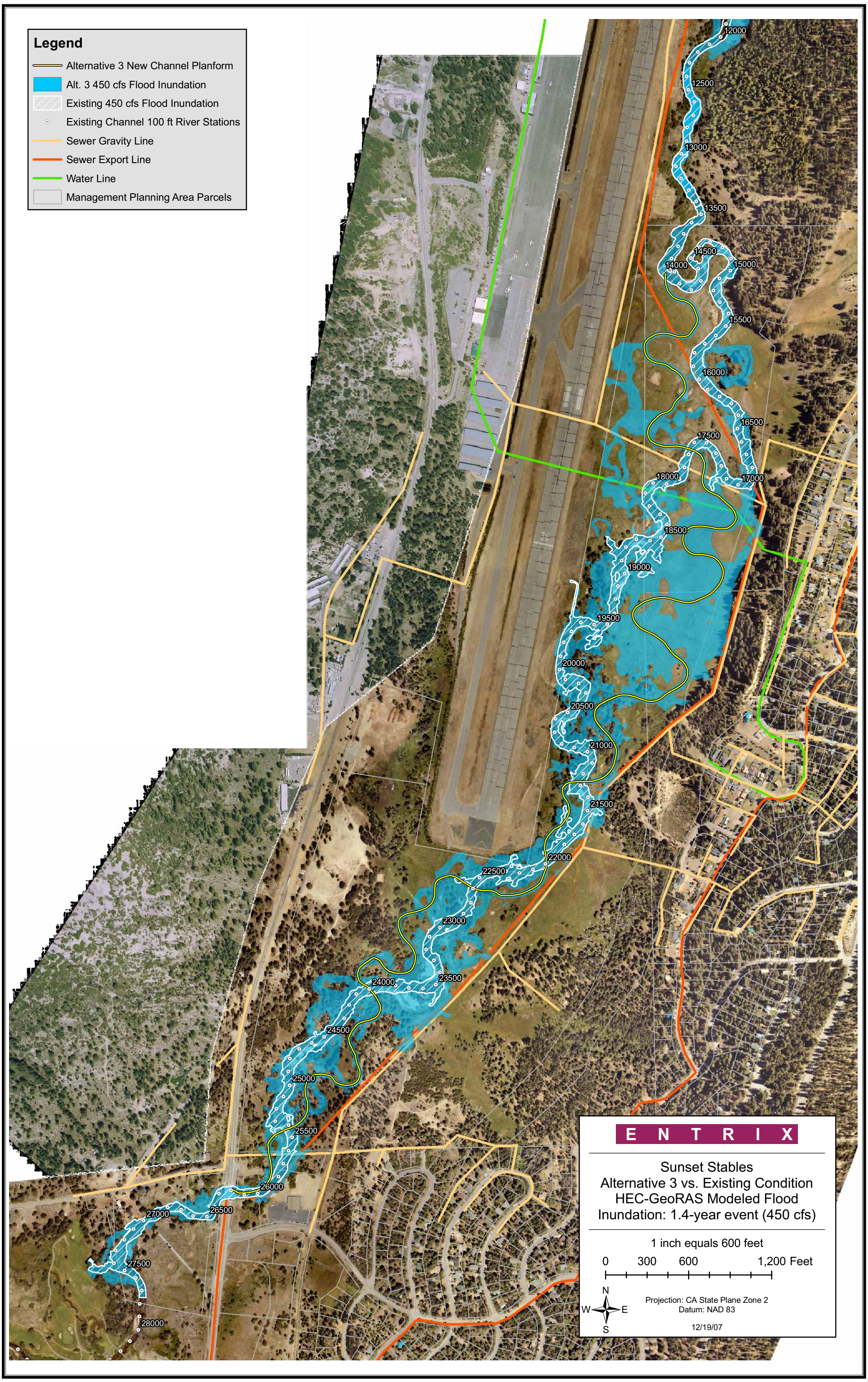


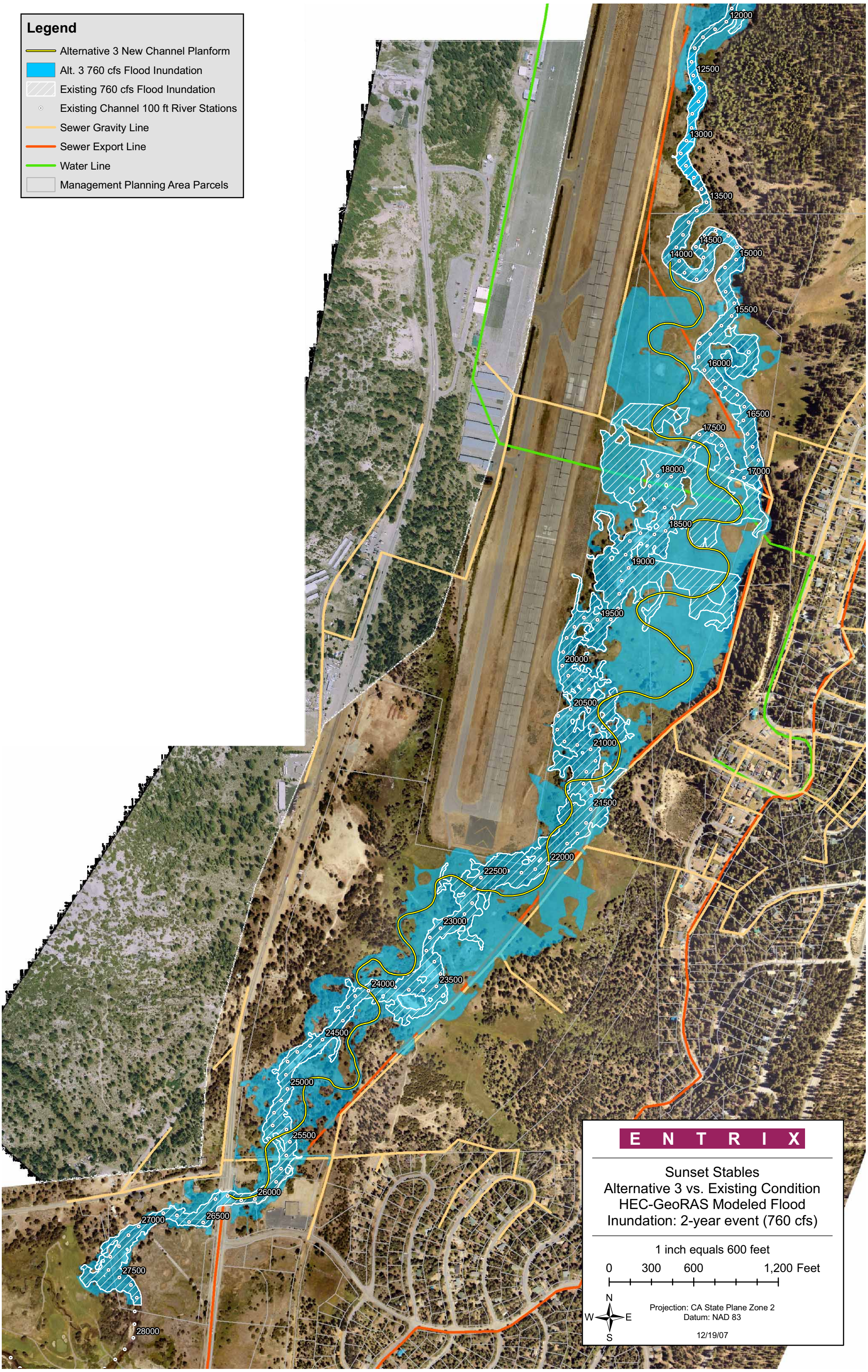
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Critical Grain Size - 450 cfs

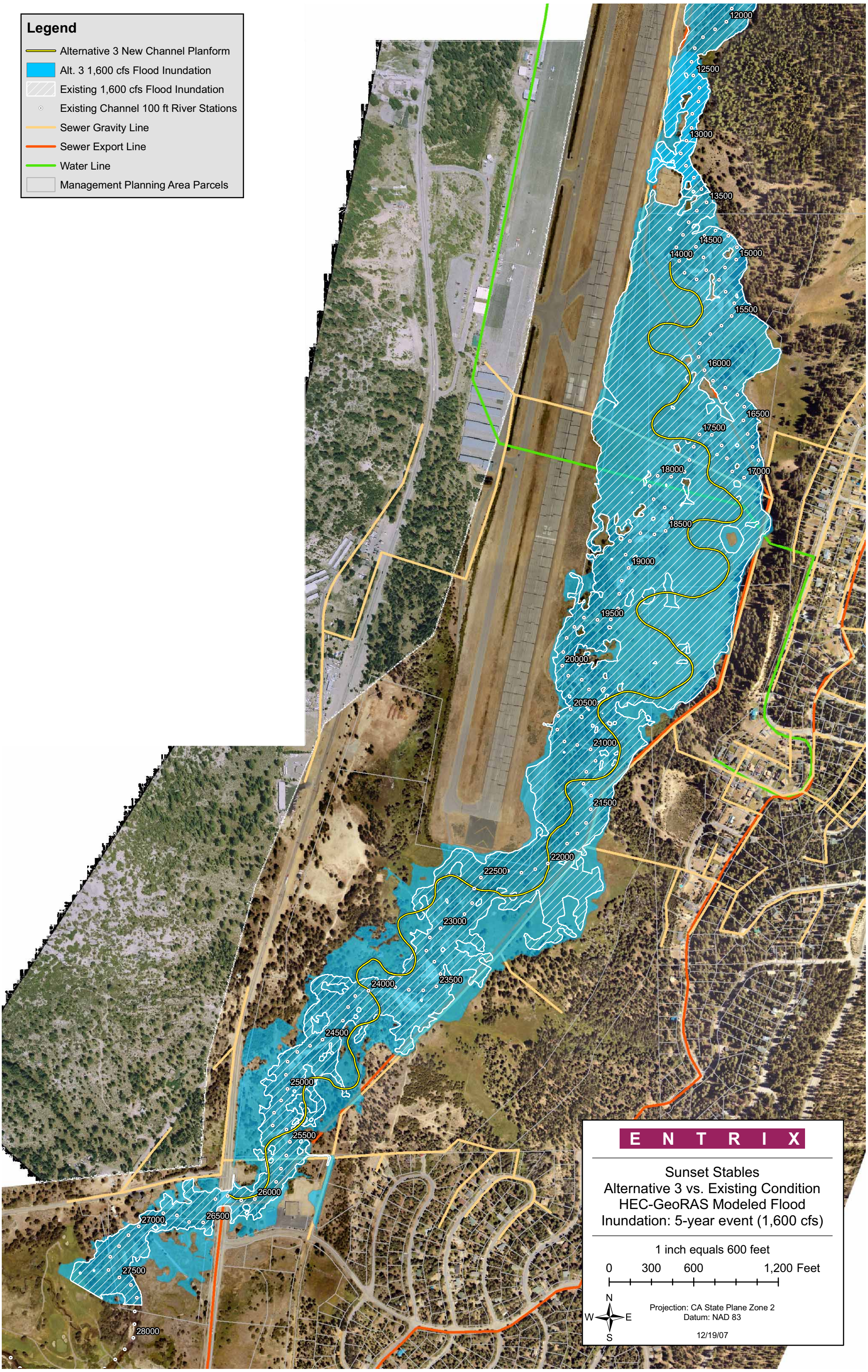


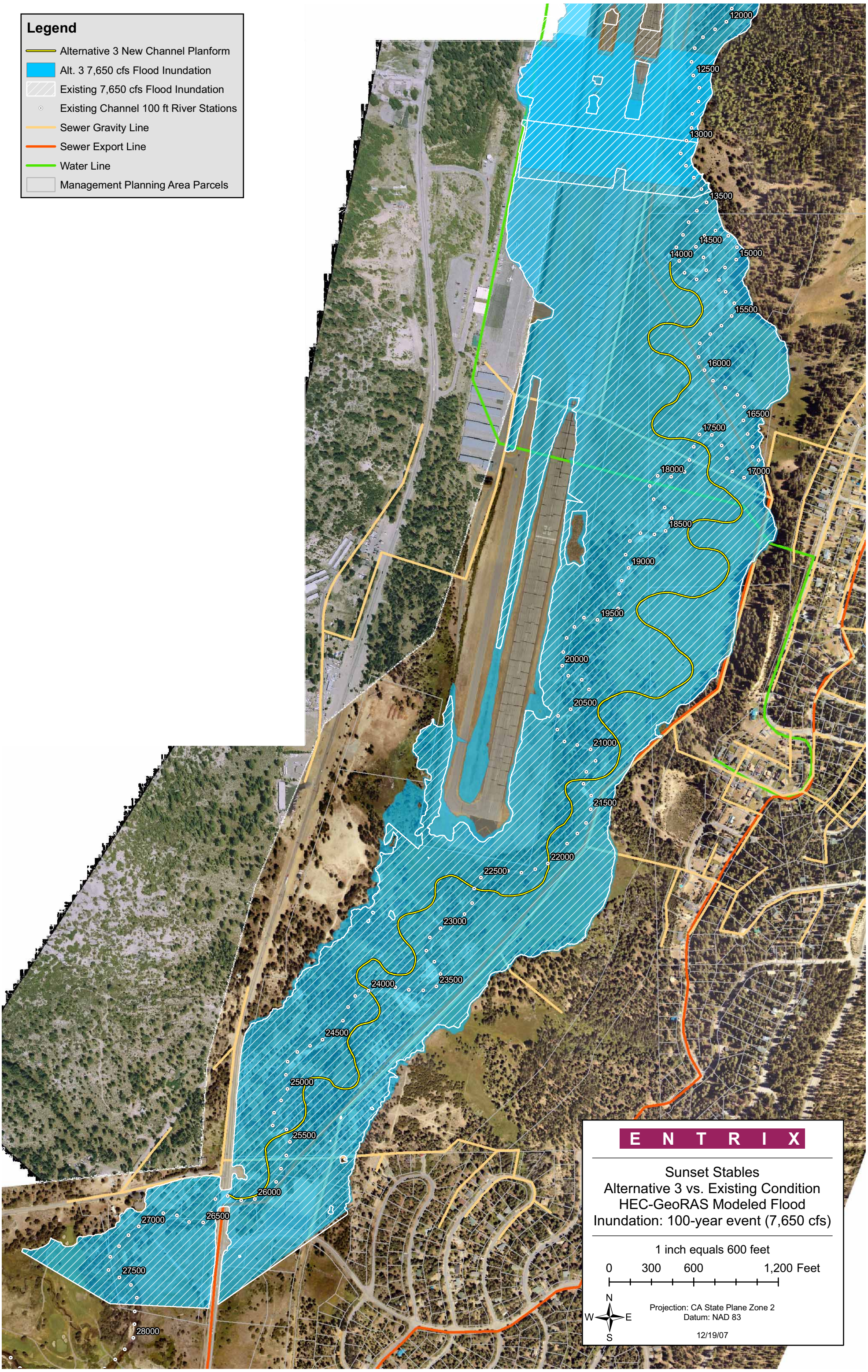
Upper Truckee River - Sunset Stables with Transitions into CSLT Middle Reach & CA State Parks Golf Course Reach
Sunset Stables Alt. 3 & Middle Reach Preferred Alt. vs. Existing Conditions - Modeled Water Surface & Thalweg Elevation - 450 cfs




Legend
Alternative 3 New Channel Planform
Alt. 3 450 cfs Flood Inundation
Existing 450 cfs Flood Inundation
Existing Channel 100 ft River Stations
Sewer Gravity Line
Sewer Export Line
Water Line
Management Planning Area Parcels
12000
12500
13000
13500
14000
14500
15000
15500
16000
16500
17000
17500
18000
18500
19000
19500
20000
20500
21000
21500
22000
22500
23000
23500
24000
24500
25000
25500
26000
26500
27000
27500
28000
ENTRIX
Sunset Stables
Alternative 3 vs. Existing Condition
HEC-GeoRAS Modeled Flood
Inundation: 1.4-year event (450 cfs)
1 inch equals 600 feet
0
300
600
1,200 Feet
N
W
E
S
Projection: CA State Plane Zone 2
Datum: NAD 83
12/19/07


Legend
Alternative 3 New Channel Planform
Alt. 3 760 cfs Flood Inundation
Existing 760 cfs Flood Inundation
Existing Channel 100 ft River Stations
Sewer Gravity Line
Sewer Export Line
Water Line
Management Planning Area Parcels
12000
12500
13000
13500
14000
14500
15000
15500
16000
16500
17000
17500
18000
18500
19000
19500
20000
20500
21000
21500
22000
22500
23000
23500
24000
24500
25000
25500
26000
26500
27000
27500
28000
ENTRIX
Sunset Stables
Alternative 3 vs. Existing Condition
HEC-GeoRAS Modeled Flood
Inundation: 2-year event (760 cfs)
1 inch equals 600 feet
0
300
600
1,200 Feet
N
W
E
S
Projection: CA State Plane Zone 2
Datum: NAD 83
12/19/07


Legend
Alternative 3 New Channel Planform
Alt. 3 1,600 cfs Flood Inundation
Existing 1,600 cfs Flood Inundation
Existing Channel 100 ft River Stations
Sewer Gravity Line
Sewer Export Line
Water Line
Management Planning Area Parcels
12000
12500
13000
13500
14000
14500
15000
15500
16000
16500
17000
17500
18000
18500
19000
19500
20000
20500
21000
21500
22000
22500
23000
23500
24000
24500
25000
25500
26000
26500
27000
27500
28000
ENTRIX
Sunset Stables
Alternative 3 vs. Existing Condition
HEC-GeoRAS Modeled Flood
Inundation: 5-year event (1,600 cfs)
1 inch equals 600 feet
0
300
600
1,200 Feet
N
W
E
S
Projection: CA State Plane Zone 2
Datum: NAD 83
12/19/07


Legend
Alternative 3 New Channel Planform
Alt. 3 7,650 cfs Flood Inundation
Existing 7,650 cfs Flood Inundation
Existing Channel 100 ft River Stations
Sewer Gravity Line
Sewer Export Line
Water Line
Management Planning Area Parcels
12000
12500
13000
13500
14000
14500
15000
15500
16000
16500
17000
17500
18000
18500
19000
19500
20000
20500
21000
21500
22000
22500
23000
23500
24000
24500
25000
25500
26000
26500
27000
27500
28000
ENTRIX
Sunset Stables
Alternative 3 vs. Existing Condition
HEC-GeoRAS Modeled Flood
Inundation: 100-year event (7,650 cfs)
1 inch equals 600 feet
0
300
600
1,200 Feet
N
W
E
S
Projection: CA State Plane Zone 2
Datum: NAD 83
12/19/07