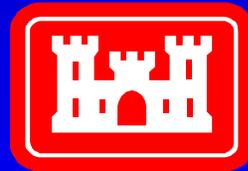


Truckee Meadows Flood Control Project

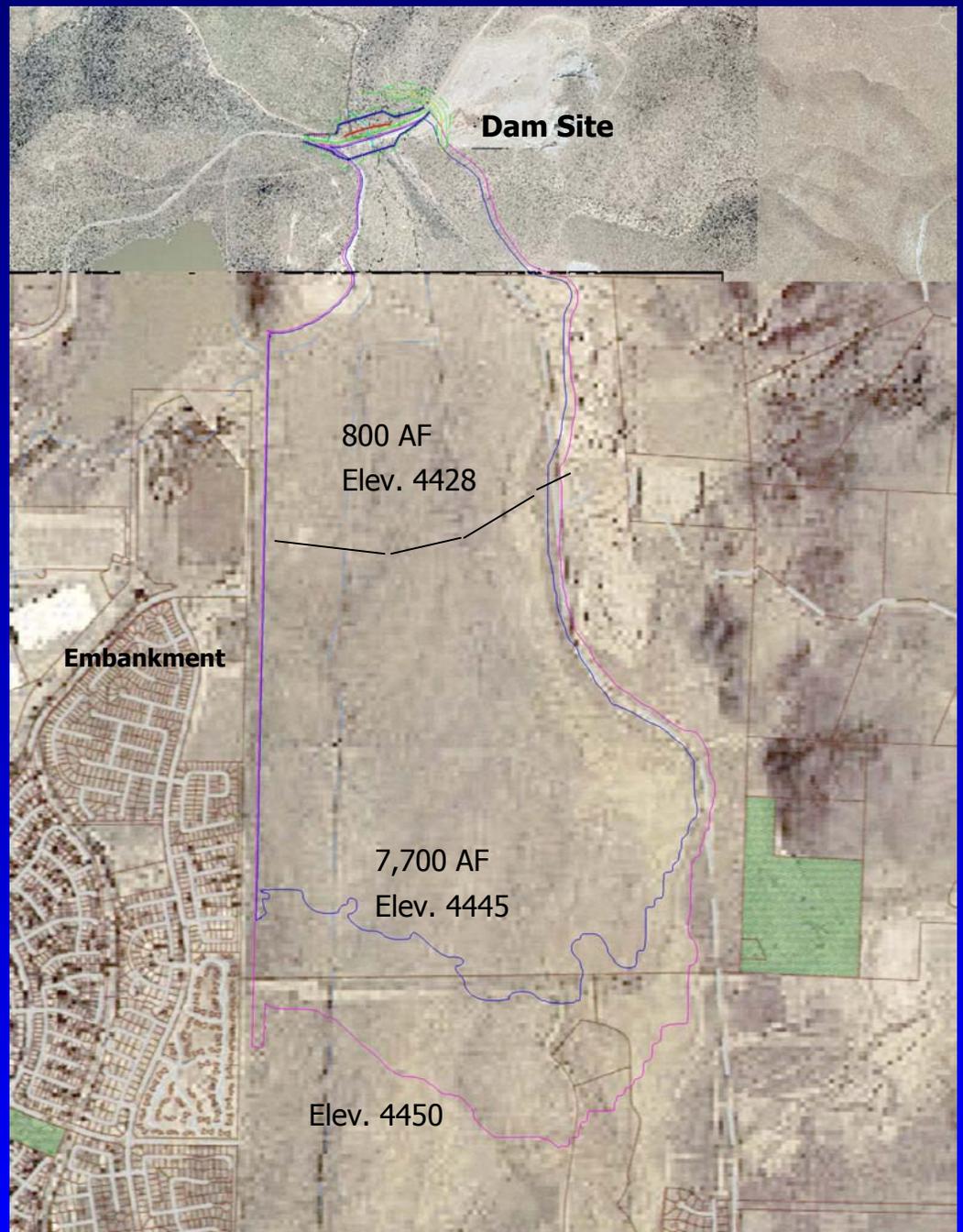
March 29, 2005



Tonight's Discussion

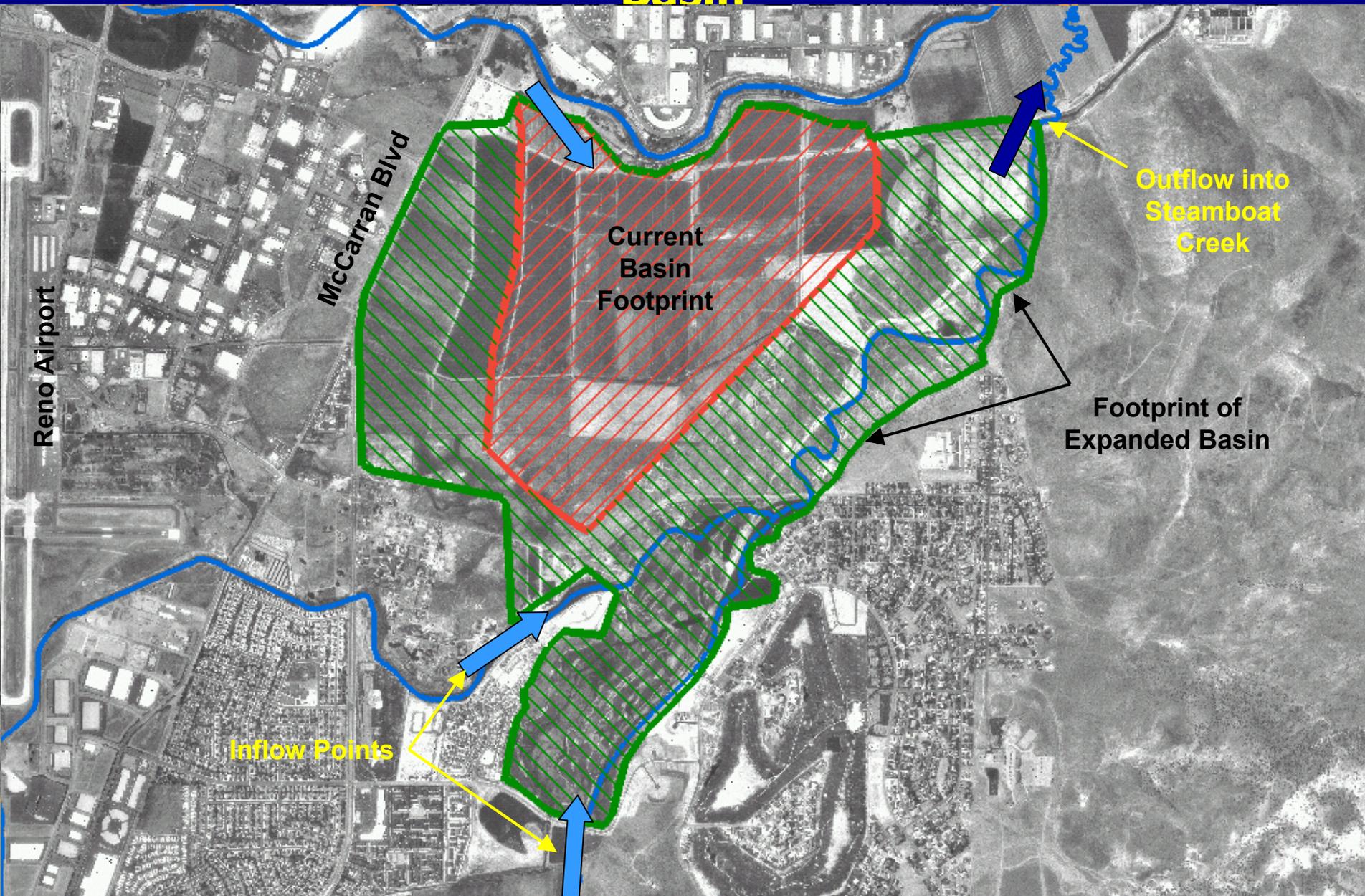
- Upstream of Vista
- Detention Downstream
- Rainbow Bend
- Painted Rock
- Wadsworth

Huffaker Hills

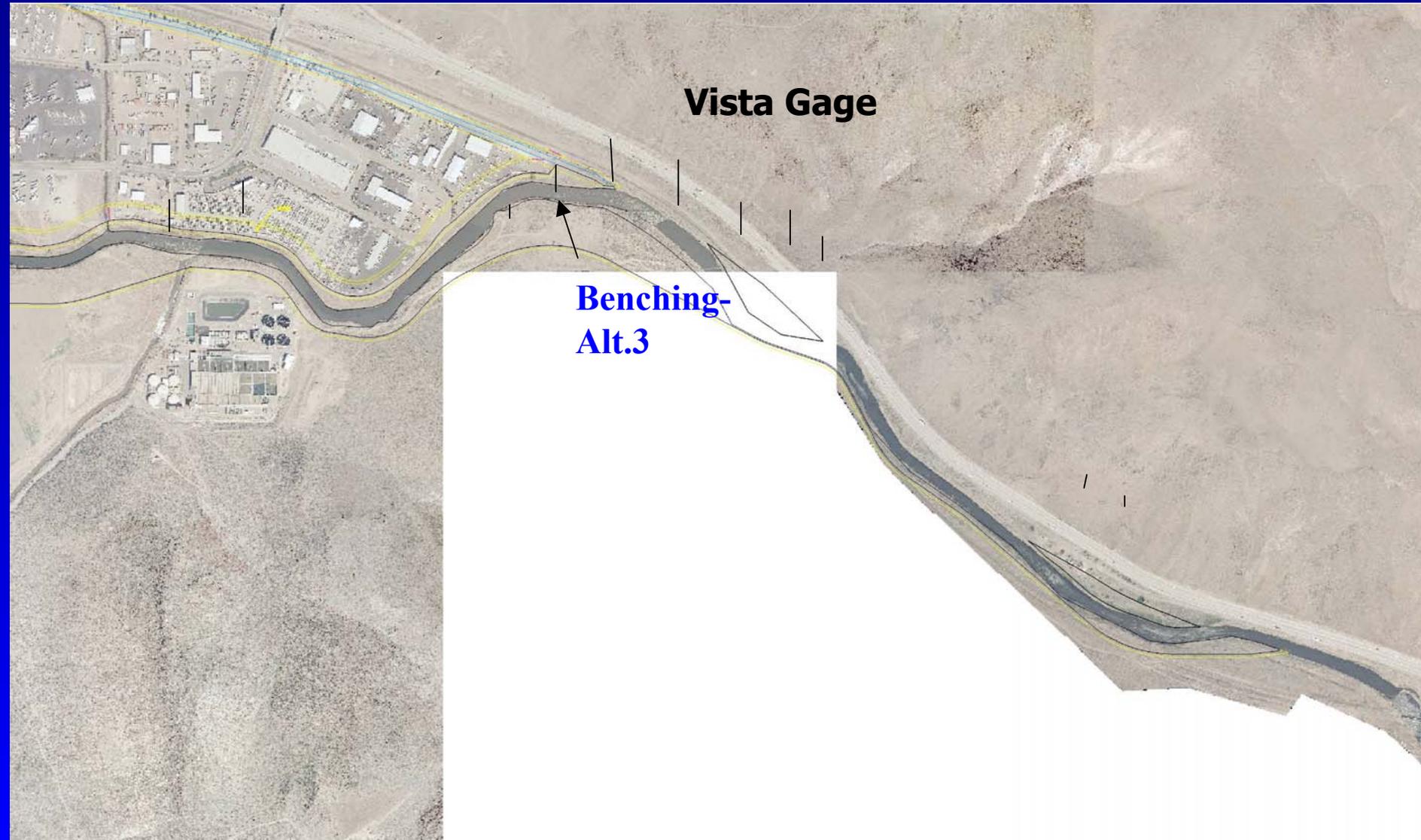


Truckee Meadows Flood Control Project

Current and Expanded UNR Farms Detention Basin



Benching at Vista



Lower Truckee River: Vista to Wadsworth Location of Proposed Lockwood Detention Basin

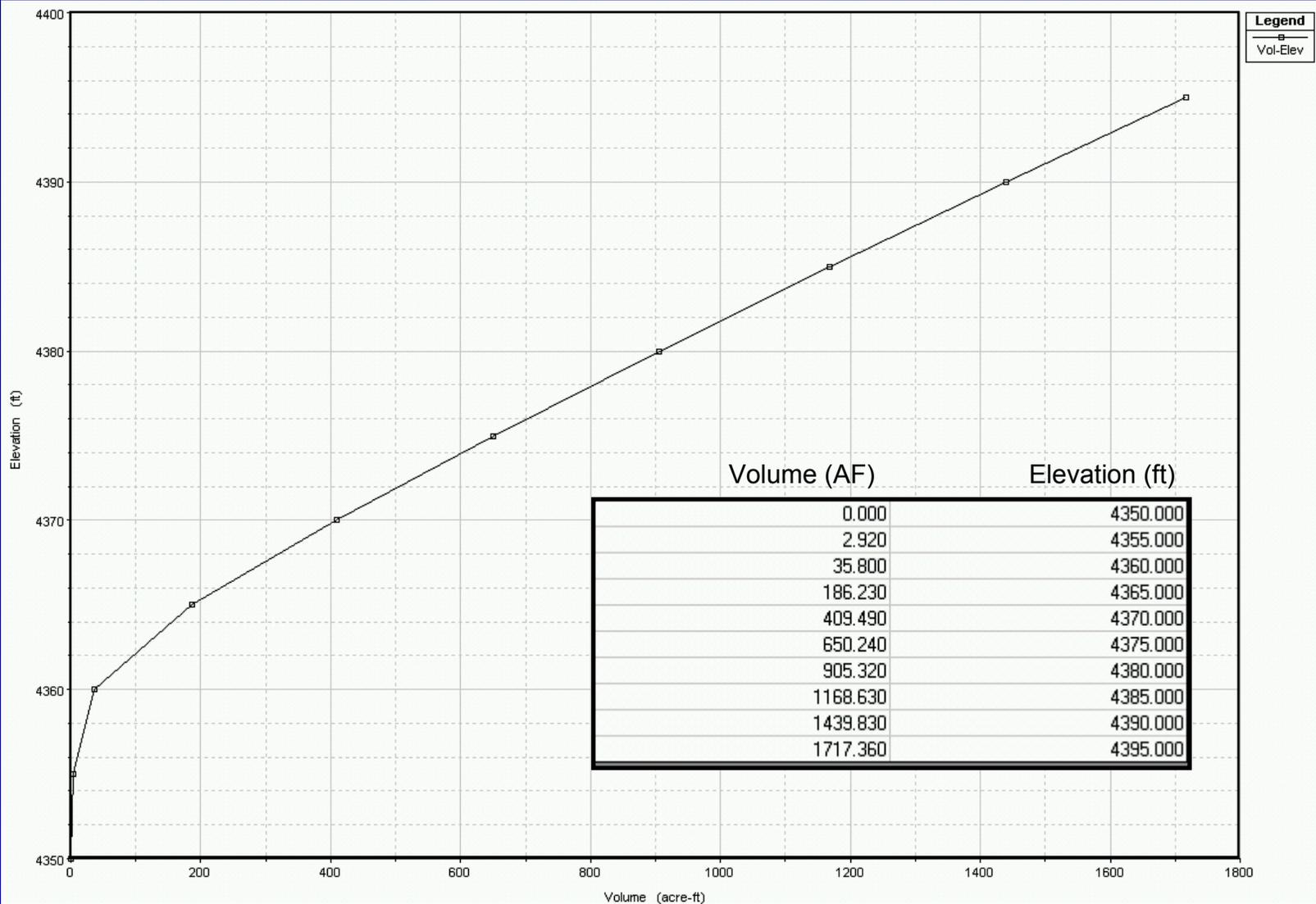


Interstate-80

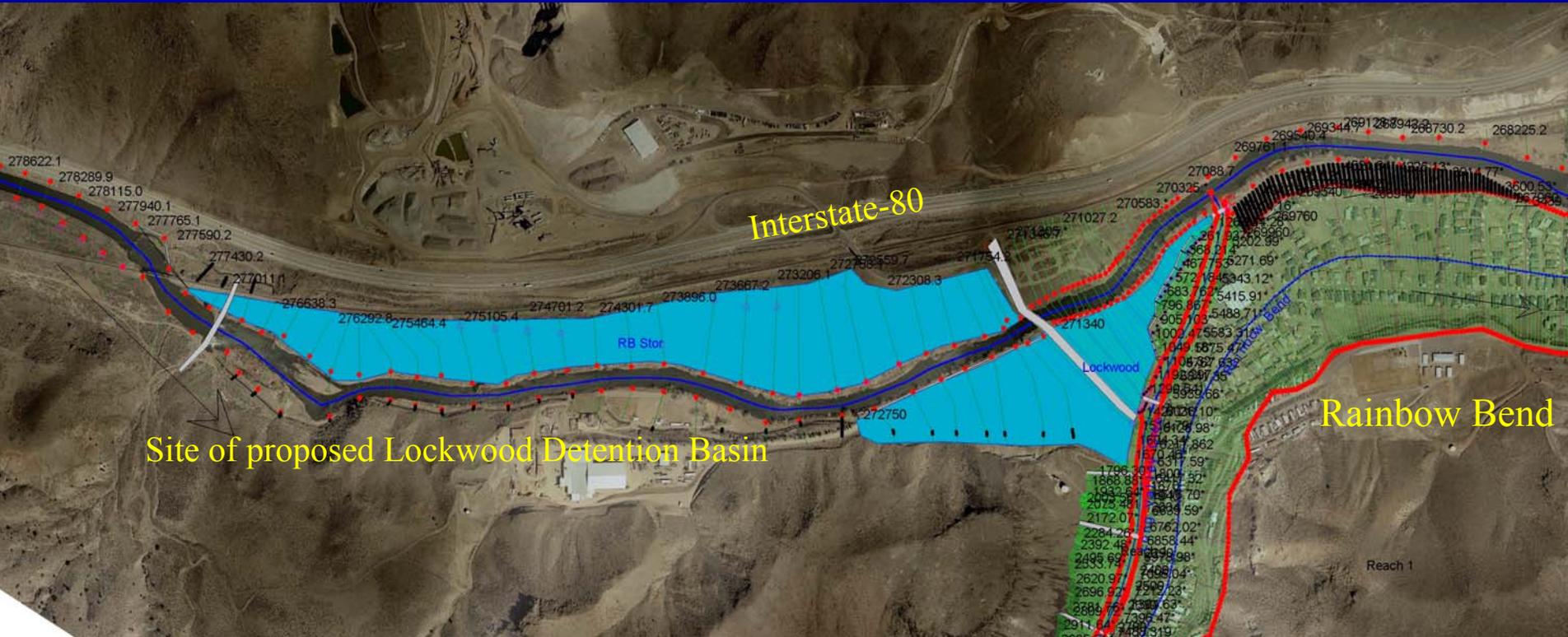
Rainbow Bend

Site of proposed Lockwood Detention Basin

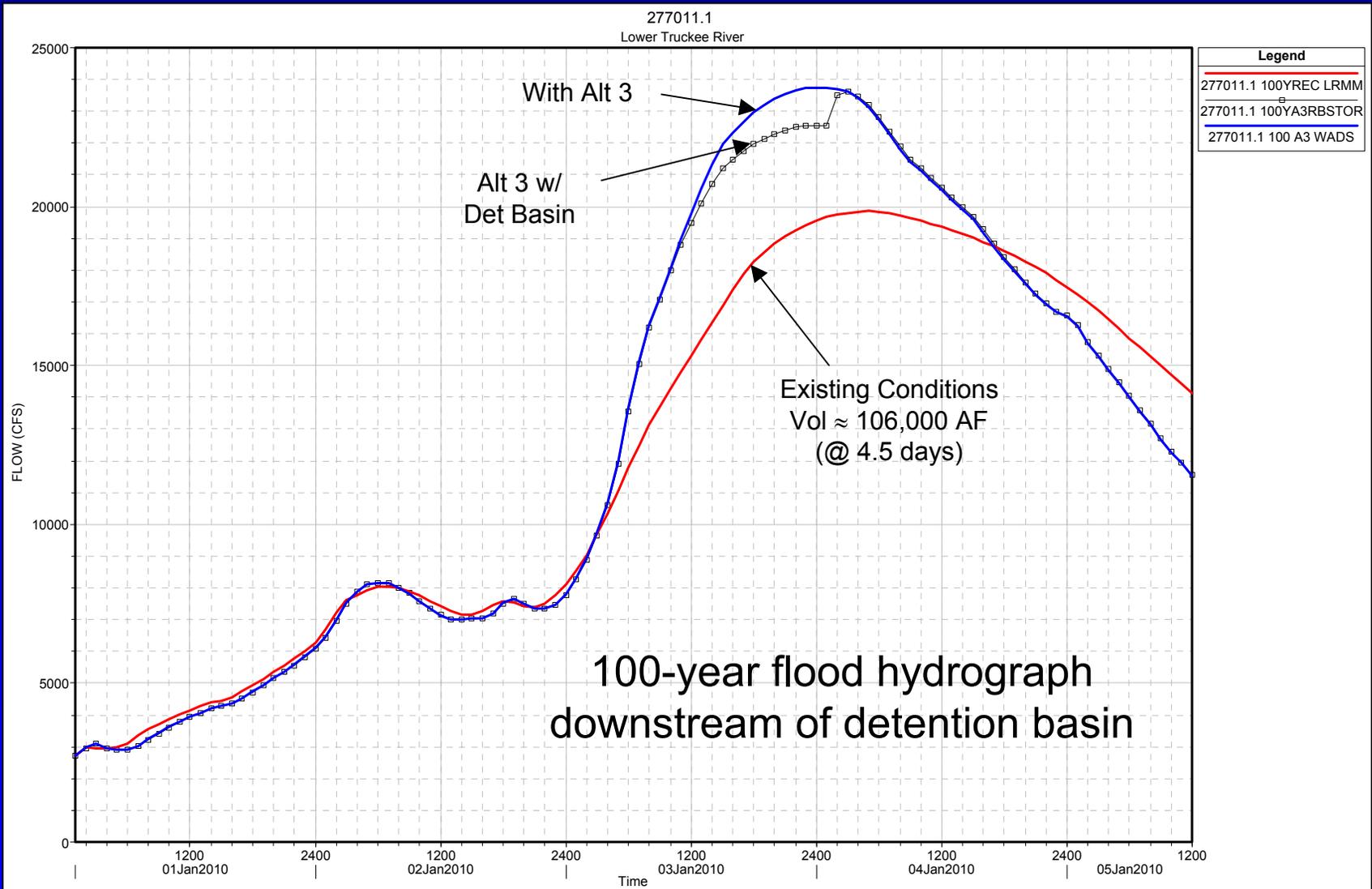
Lower Truckee River: Vista to Wadsworth Elevation vs. Storage for Lockwood Detention Basin



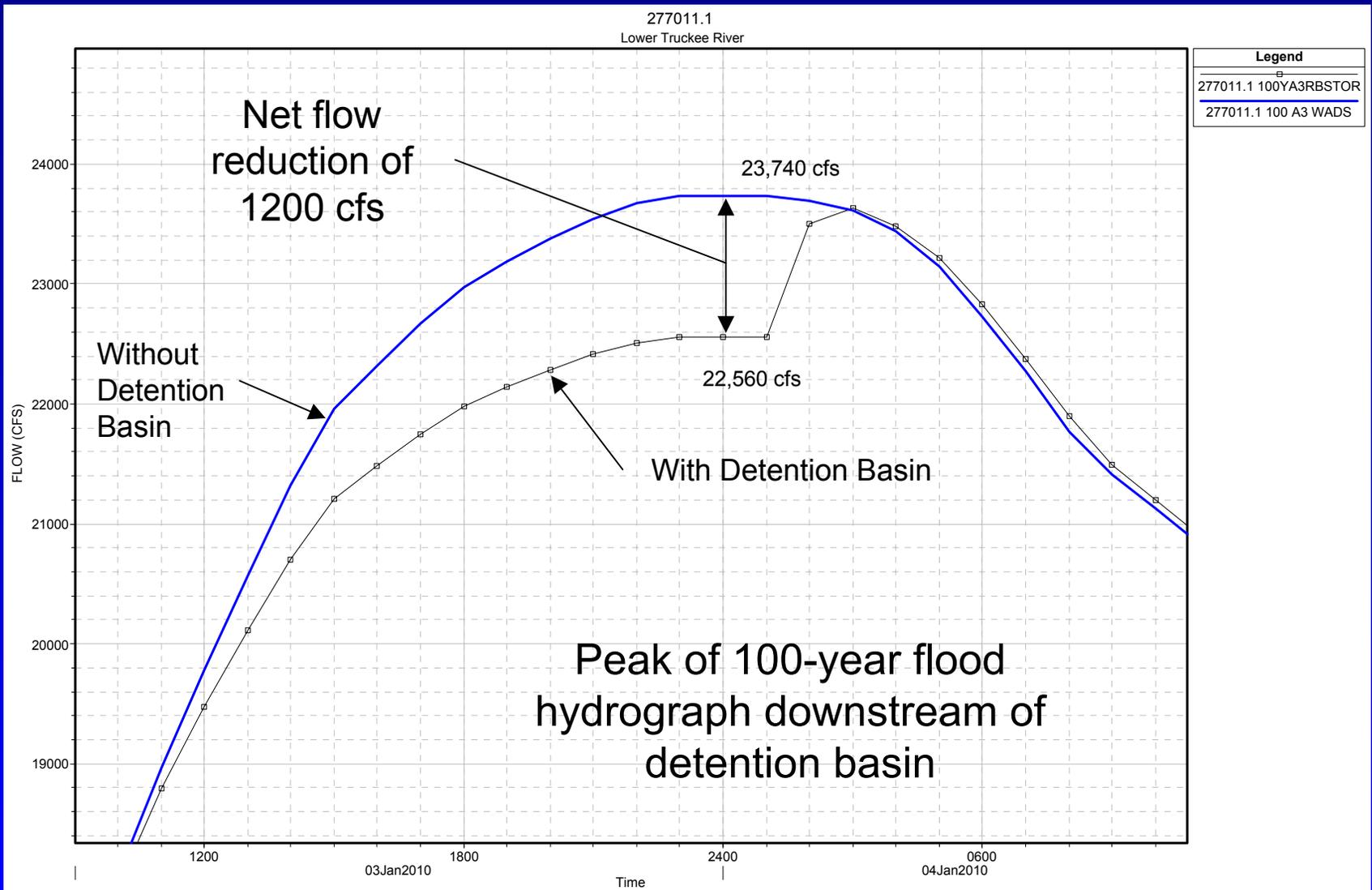
Lower Truckee River: Vista to Wadsworth HEC-RAS Modeling of the Proposed Lockwood Detention Basin



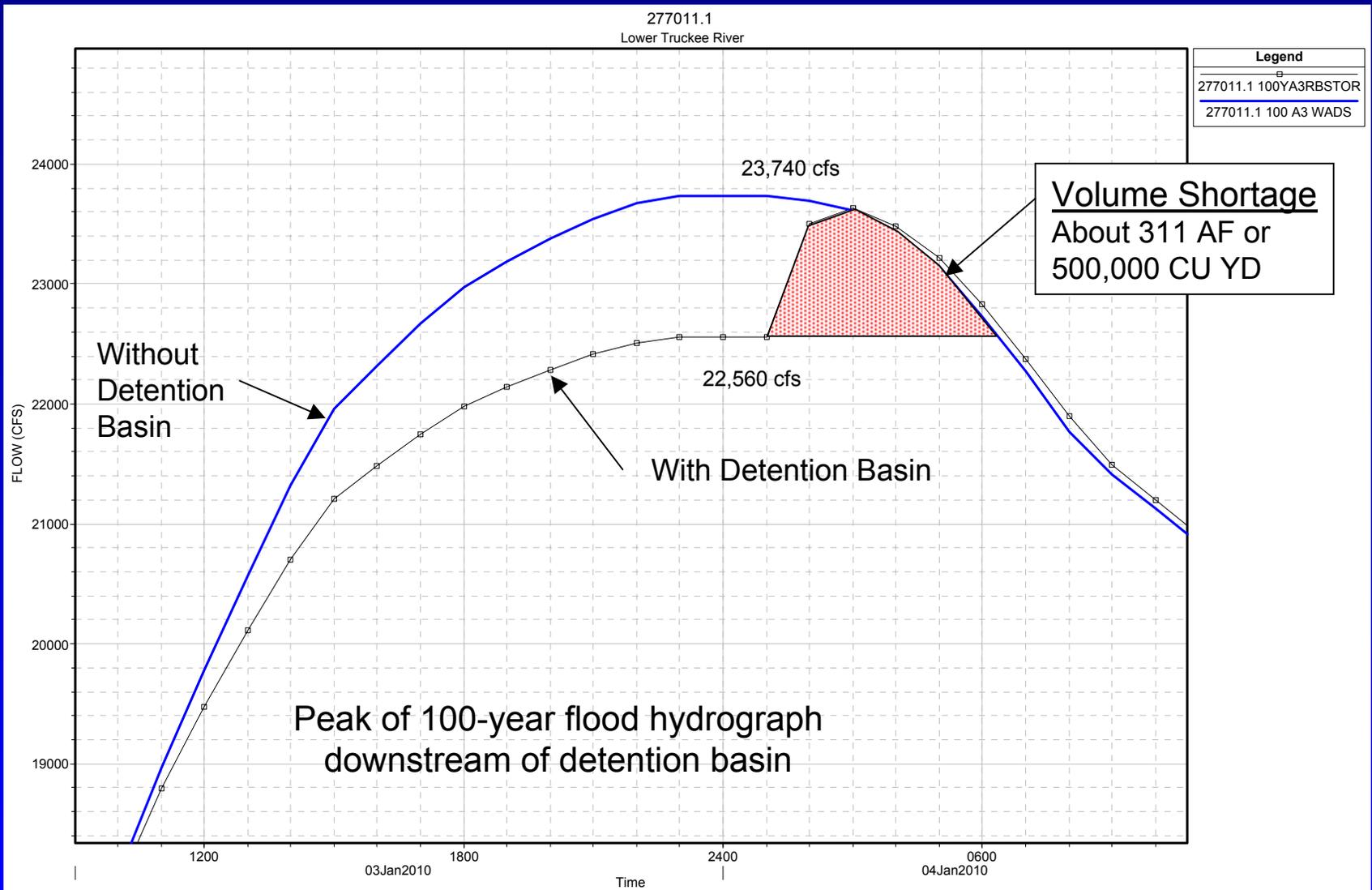
Lower Truckee River: Vista to Wadsworth Proposed Lockwood Detention Basin



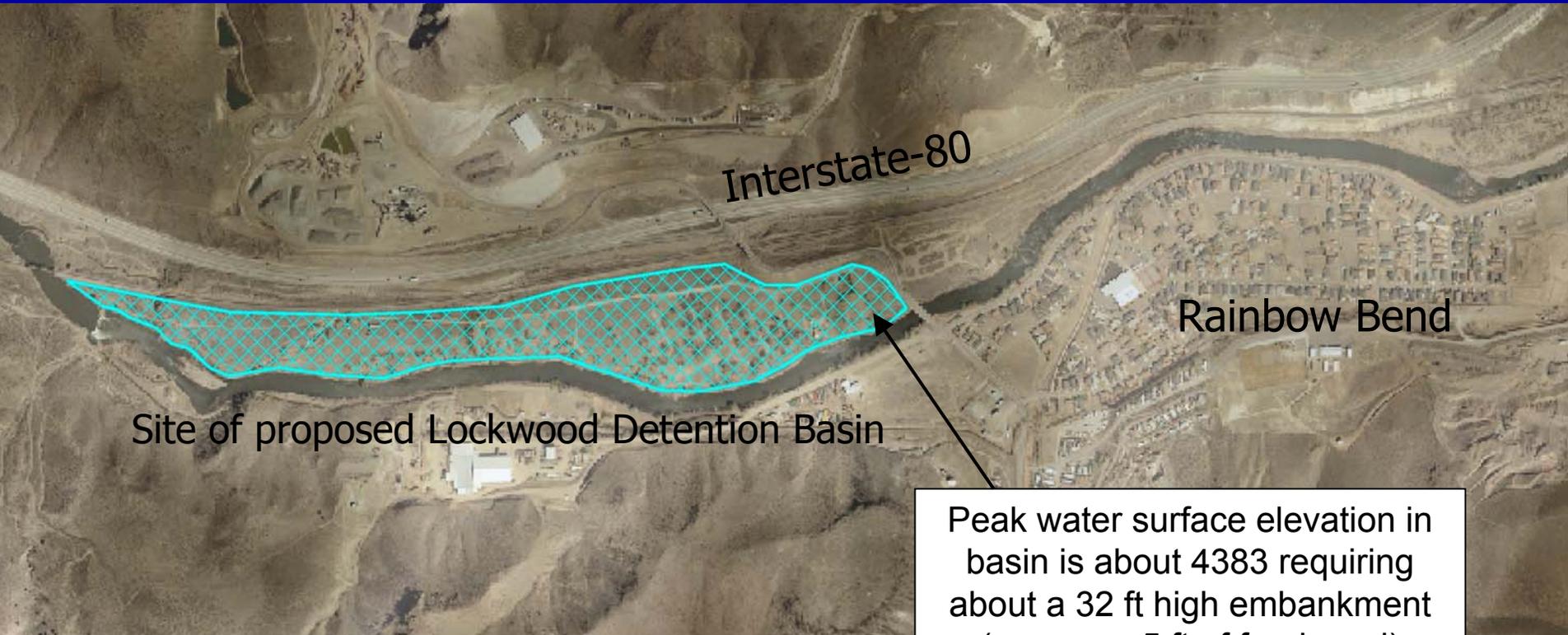
Lower Truckee River: Vista to Wadsworth Proposed Lockwood Detention Basin



Lower Truckee River: Vista to Wadsworth Proposed Lockwood Detention Basin



Lower Truckee River: Vista to Wadsworth Location of Proposed Lockwood Detention Basin



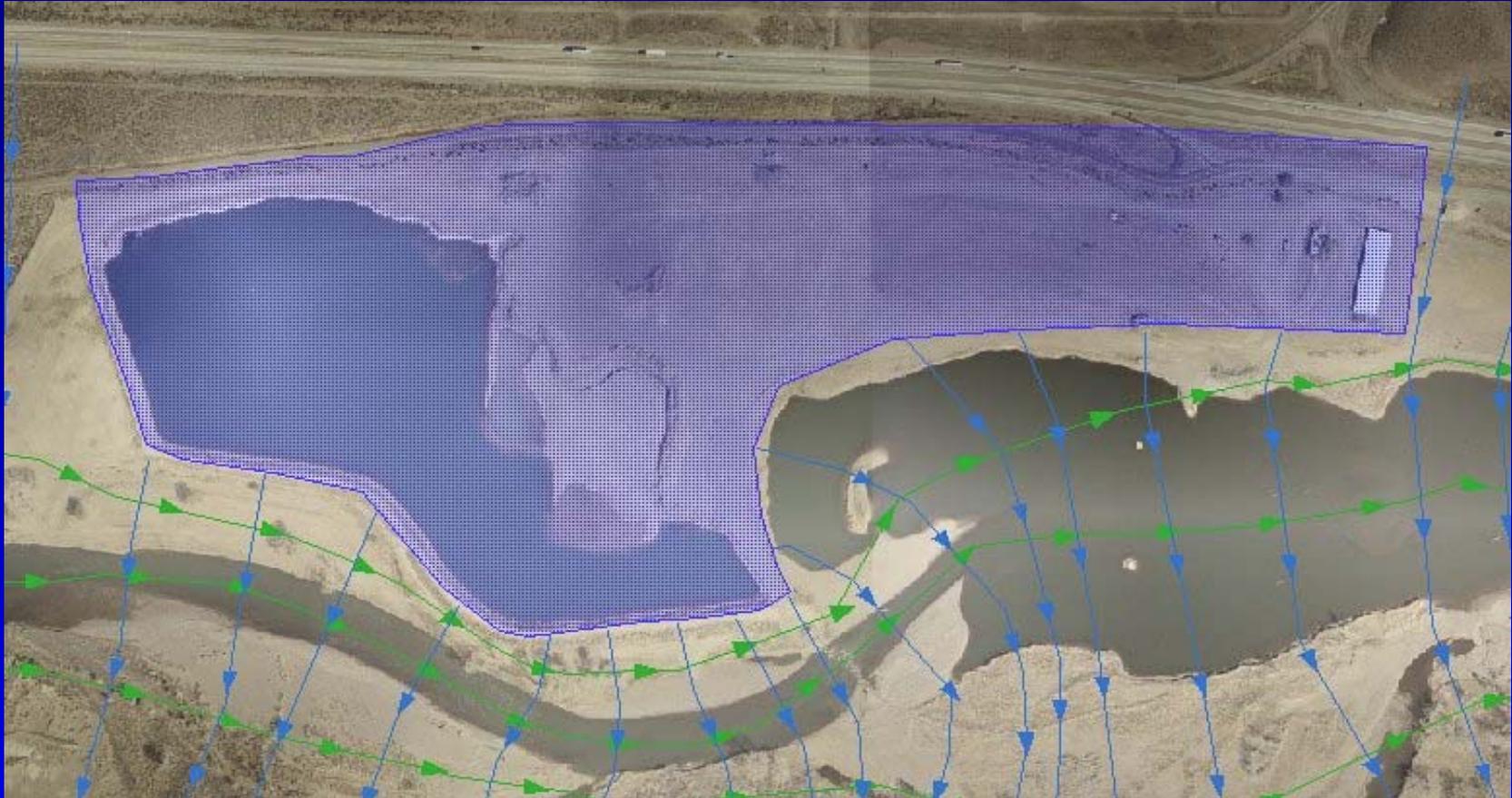
Interstate-80

Rainbow Bend

Site of proposed Lockwood Detention Basin

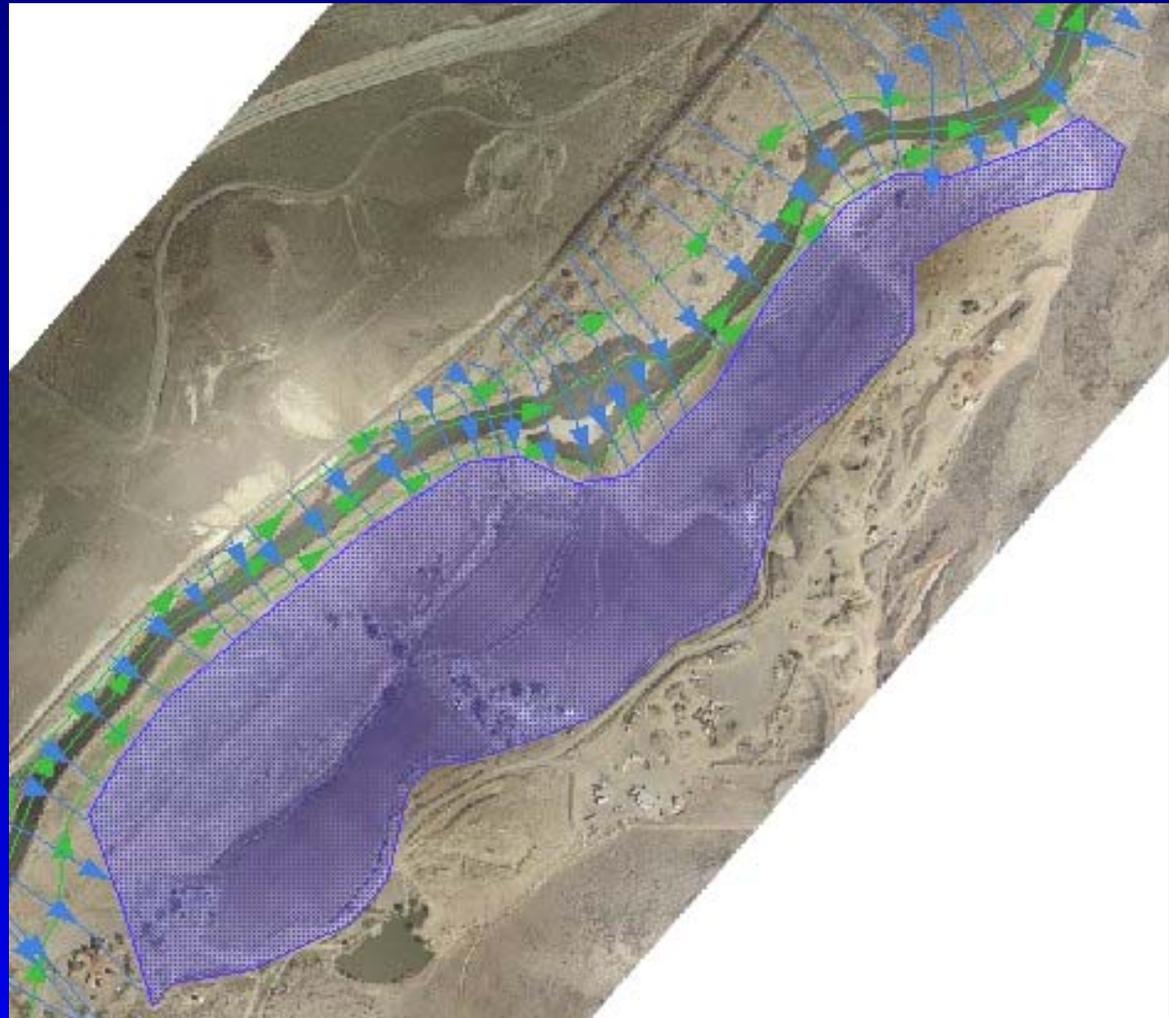
Peak water surface elevation in basin is about 4383 requiring about a 32 ft high embankment (assumes 5 ft of freeboard)

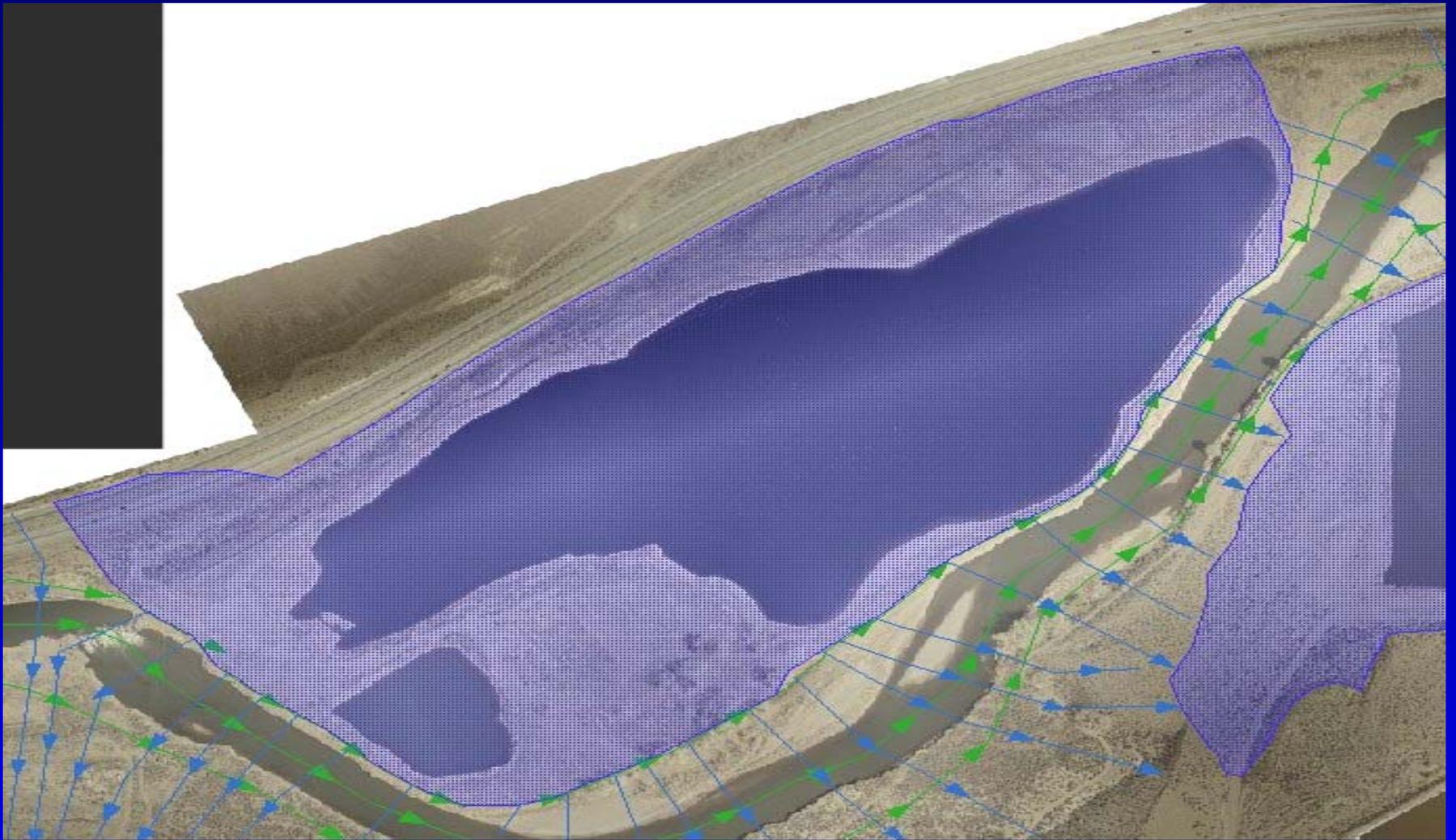
Truckee Meadows Flood Control Project



Downstream of Vista detention: downstream of Power Plant (Existing Storage Area w/ expanded area and raised embankment)-

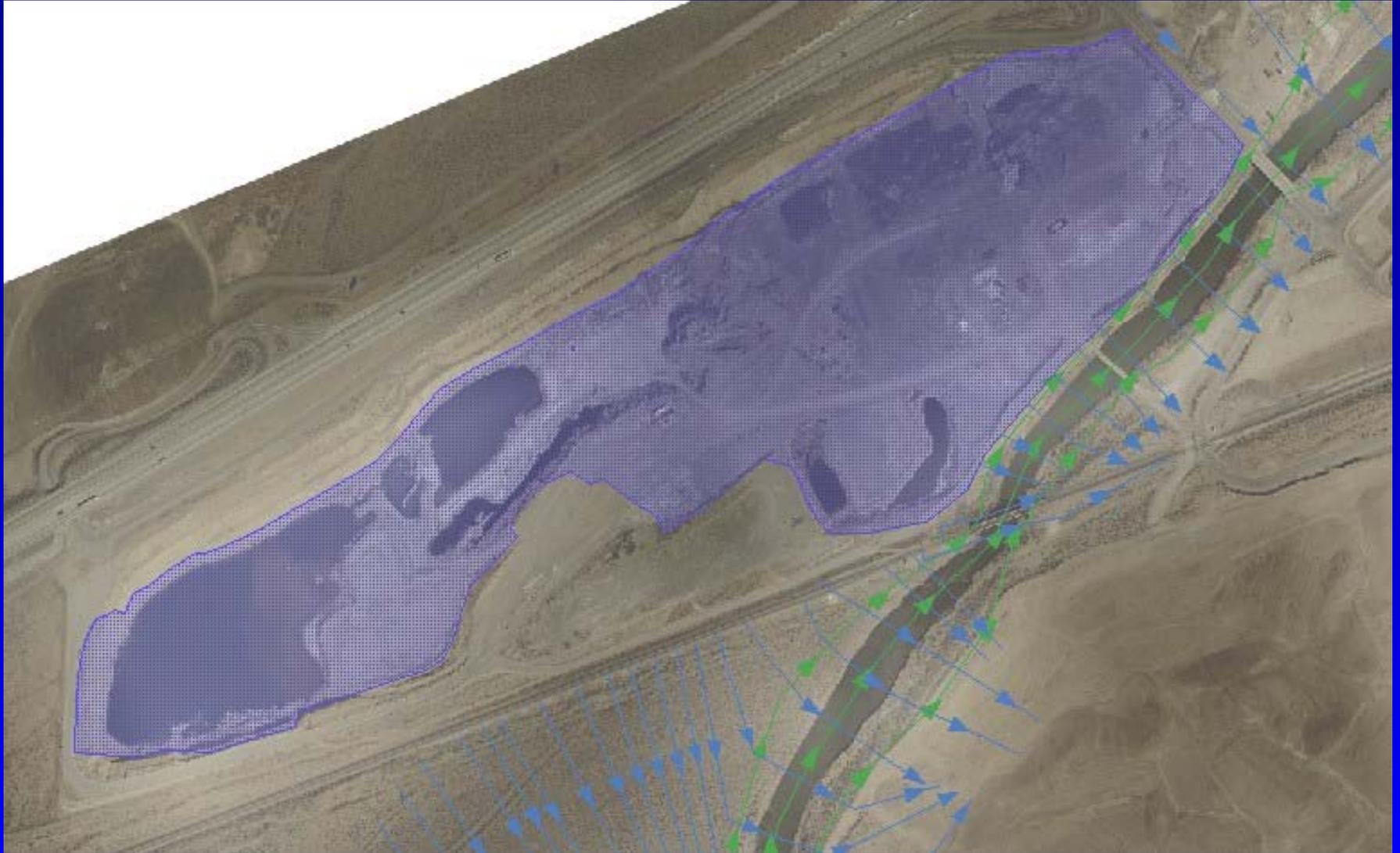
**Mustang
Ranch
Detention
Basin**





Downstream of Vista -downstream detention basin- near Tracy Power Plant (Existing Storage Area w/raised embankment)

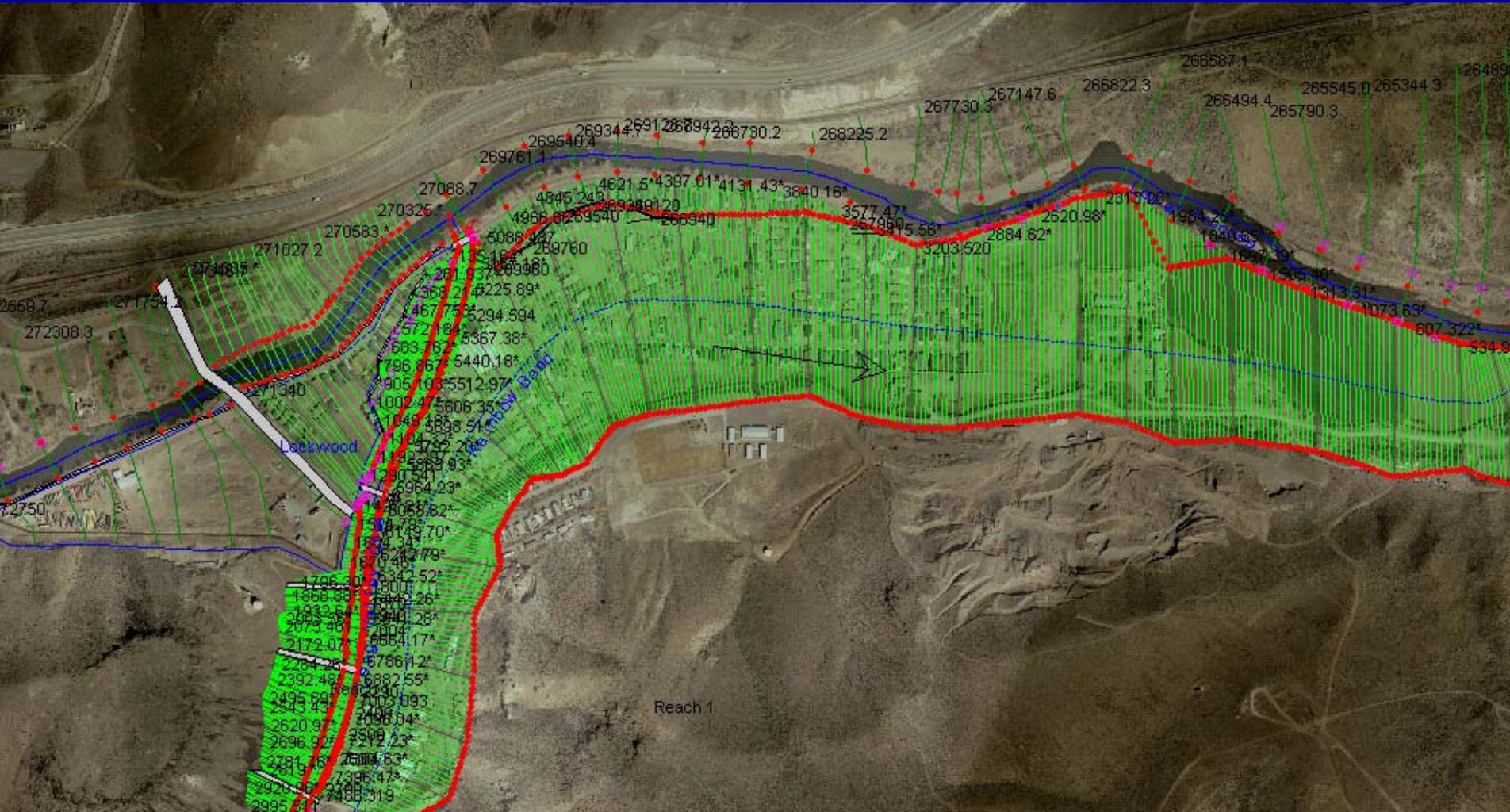
Upstream of Patrick: Existing Storage Area with raised embankment



Additional structural measures for decreasing flooding in the Rainbow Bend area

- Alternatives pertain to reducing the water surface elevation along the Truckee River or containing the flow near Rainbow Bend due to potential upstream projects
- Focus is on flooding from the Truckee River
- Uses discharge from Alternative 3 since it is associated with the highest flow

Lower Truckee River: Vista to Wadsworth HEC-RAS Model at Rainbow Bend

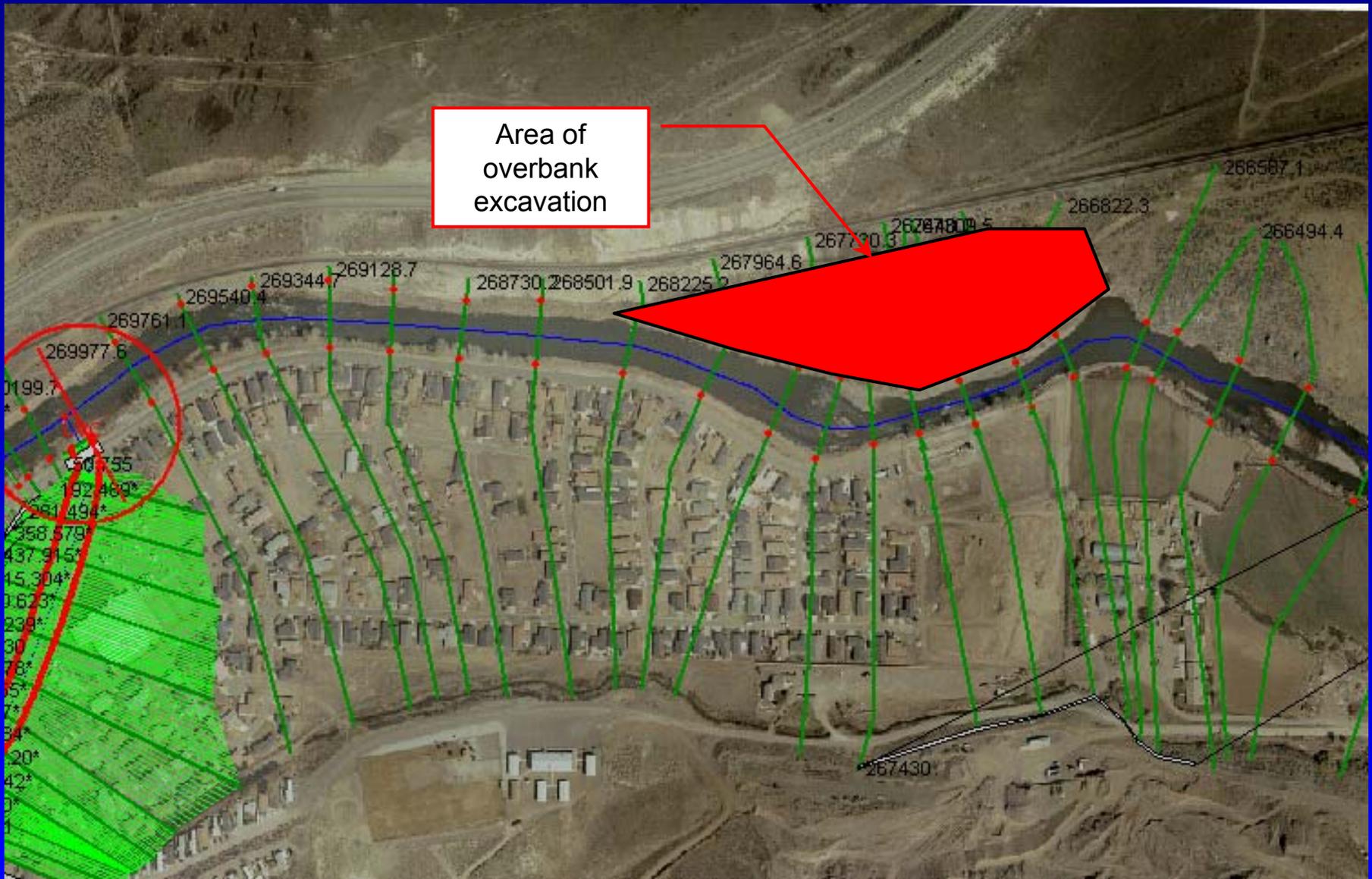


Lower Truckee River: Vista to Wadsworth

HEC-RAS Modeling

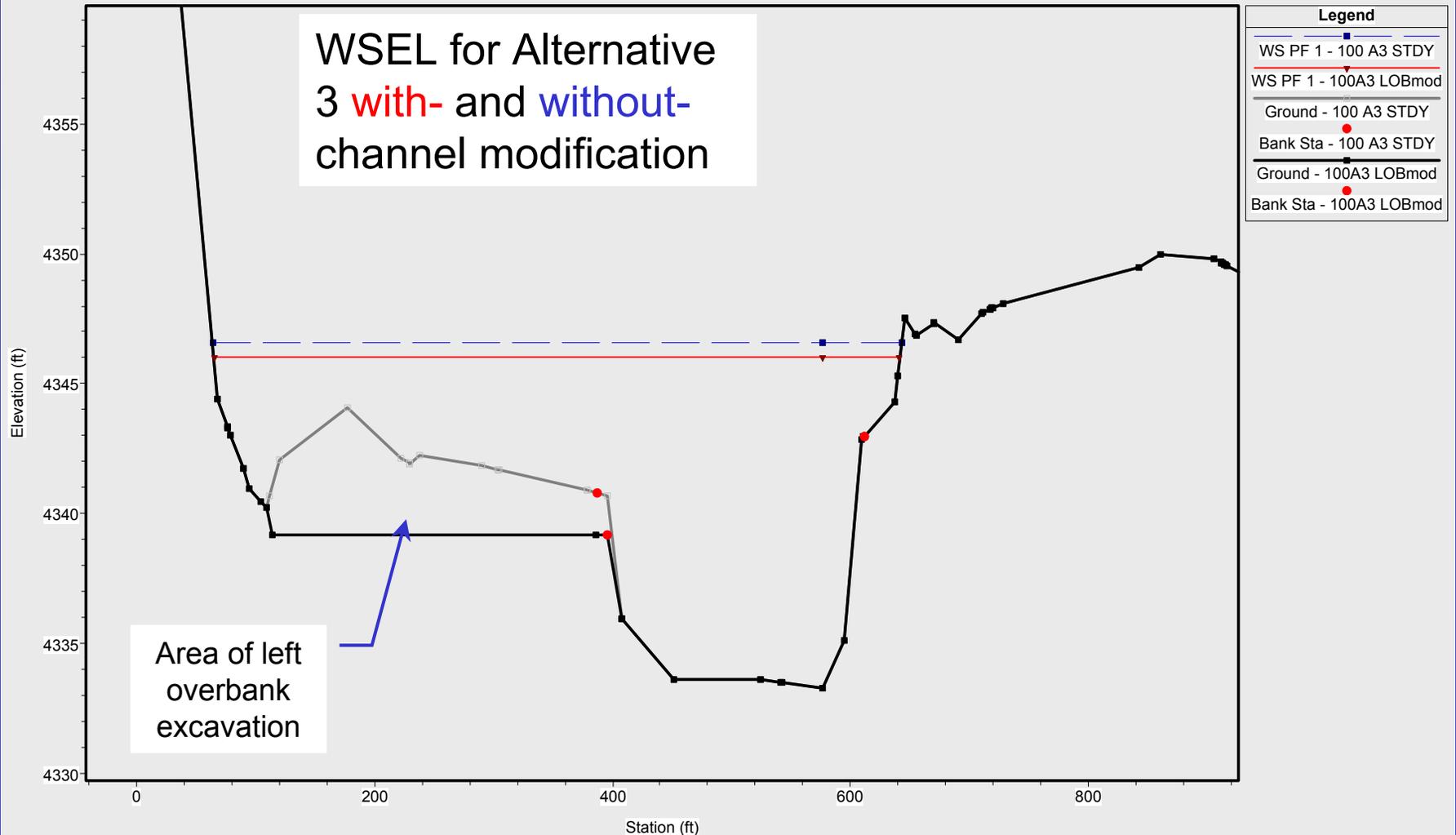
- First potential measure: Excavate left overbank downstream of Rainbow Bend
- All cross section plots are looking downstream

Lower Truckee River: Vista to Wadsworth HEC-RAS Modeling: Excavate Left Overbank



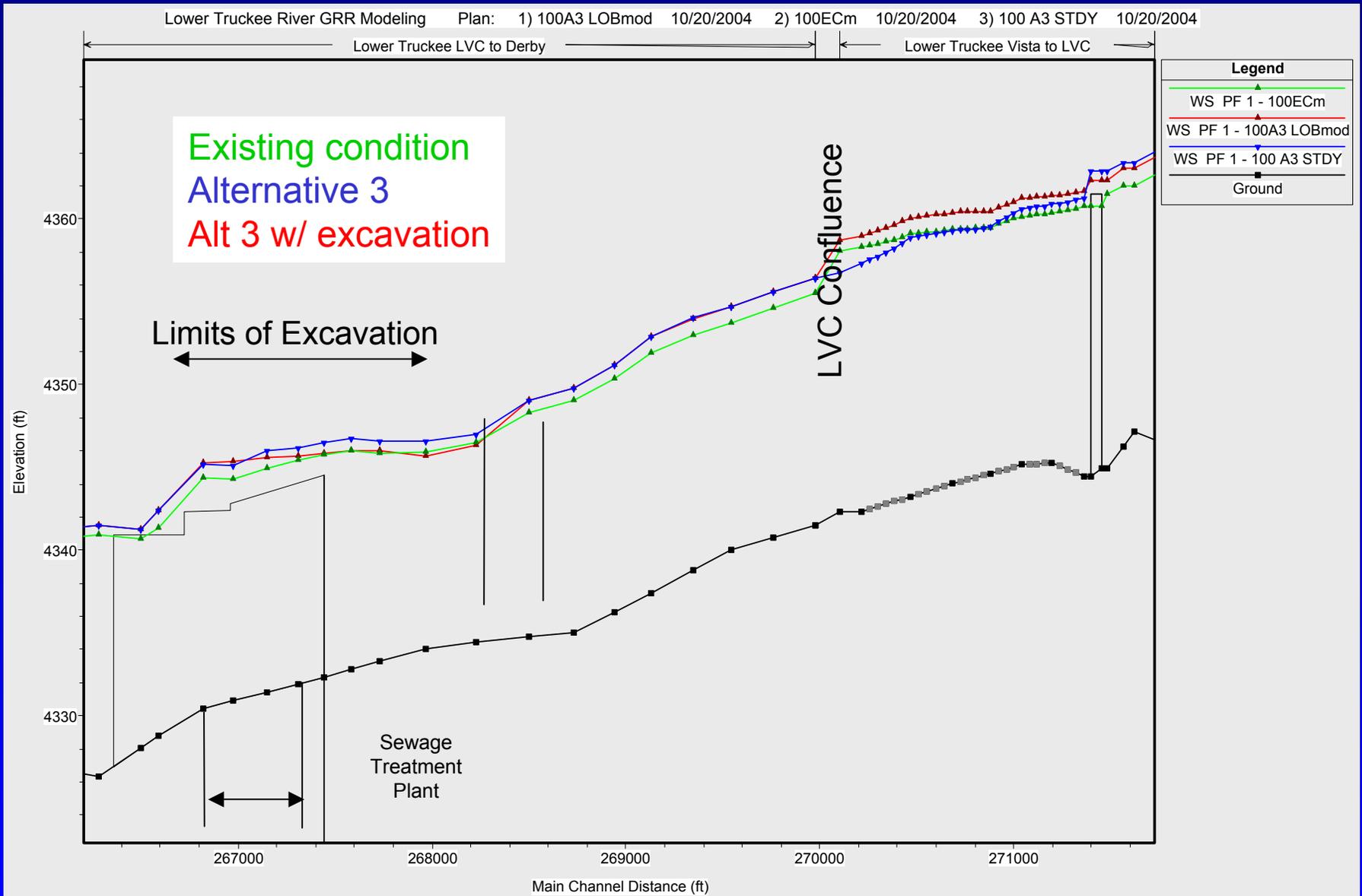
Lower Truckee River: Vista to Wadsworth HEC-RAS Modeling: Excavate Left Overbank

Lower Truckee River GRR Modeling Plan: 1) 100A3 LOBmod 2) 100 A3 STDY
River = Lower Truckee Reach = LVC to Derby RS = 267730.3



Lower Truckee River: Vista to Wadsworth

HEC-RAS Modeling: Excavate Left Overbank



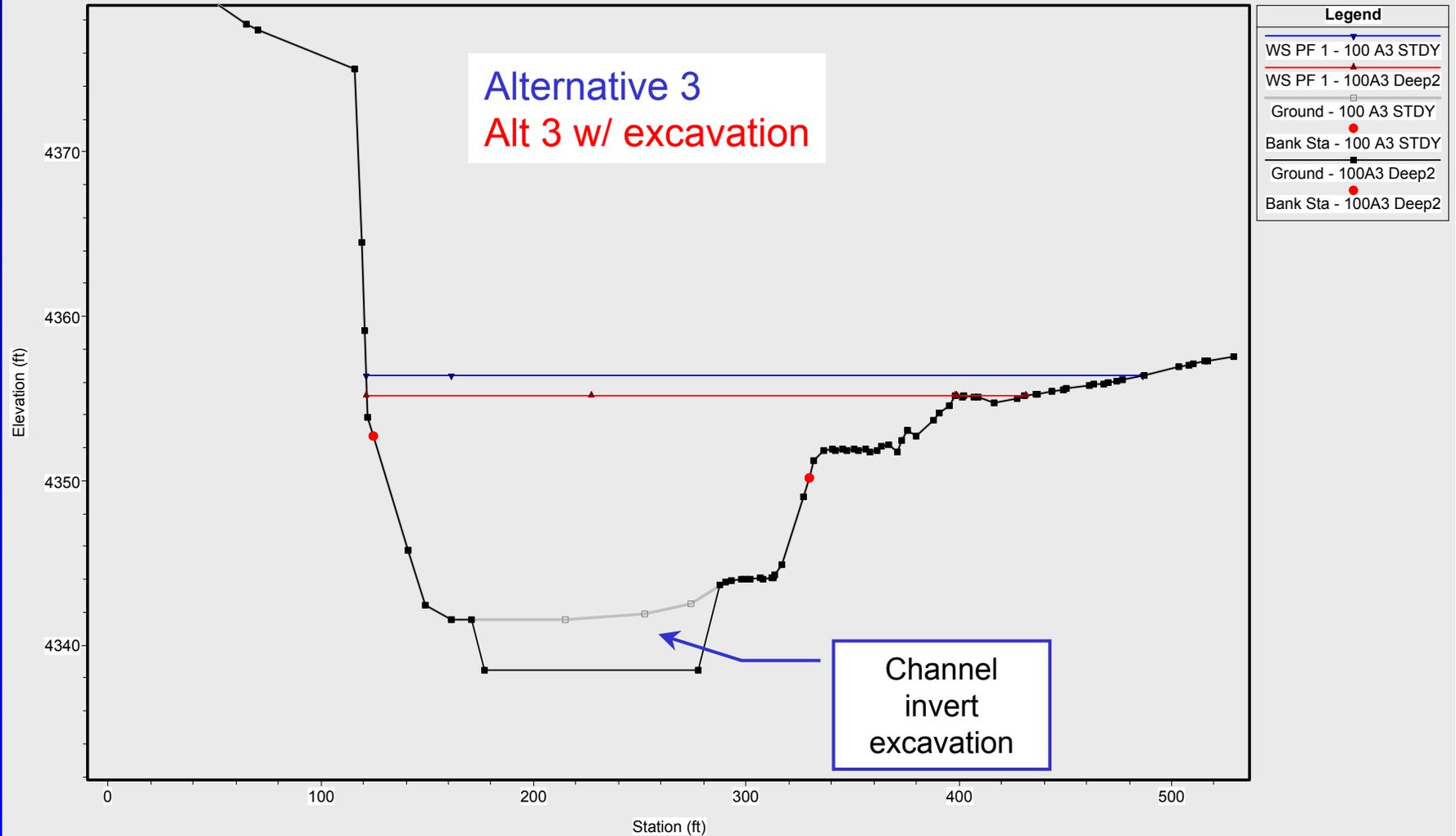
HEC-RAS Modeling

- Second potential measure: Excavate channel bottom downstream and up through Lockwood Drive bridge
- Has potential of decreasing WSEL at Rainbow Bend and improving flow conditions at Lockwood Drive bridge

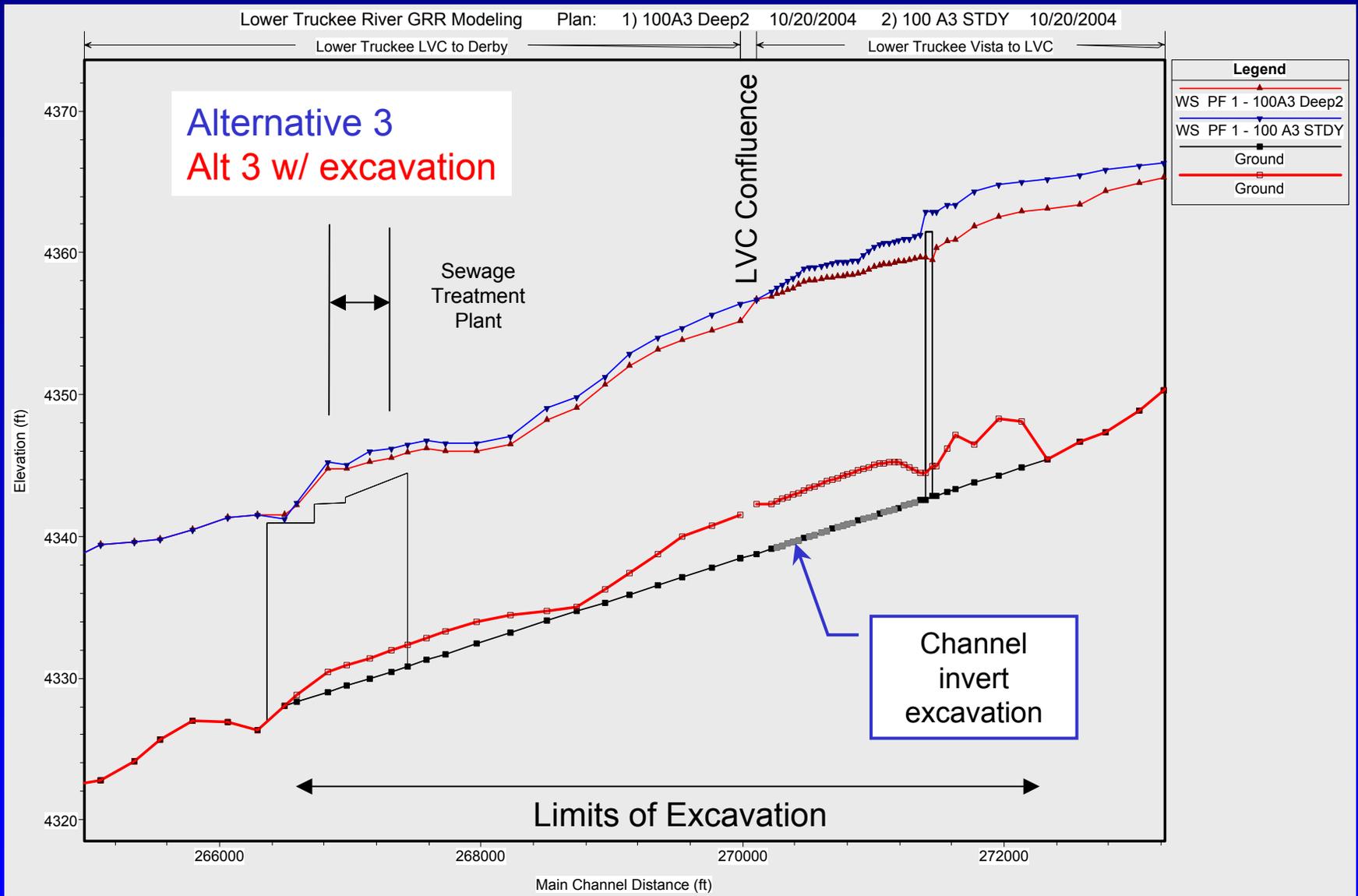
Lower Truckee River: Vista to Wadsworth

HEC-RAS Modeling: Excavate Channel Bottom

Lower Truckee River GRR Modeling Plan: 1) 100A3 Deep2 2) 100 A3 STDY
River = Lower Truckee Reach = LVC to Derby RS = 269977.6

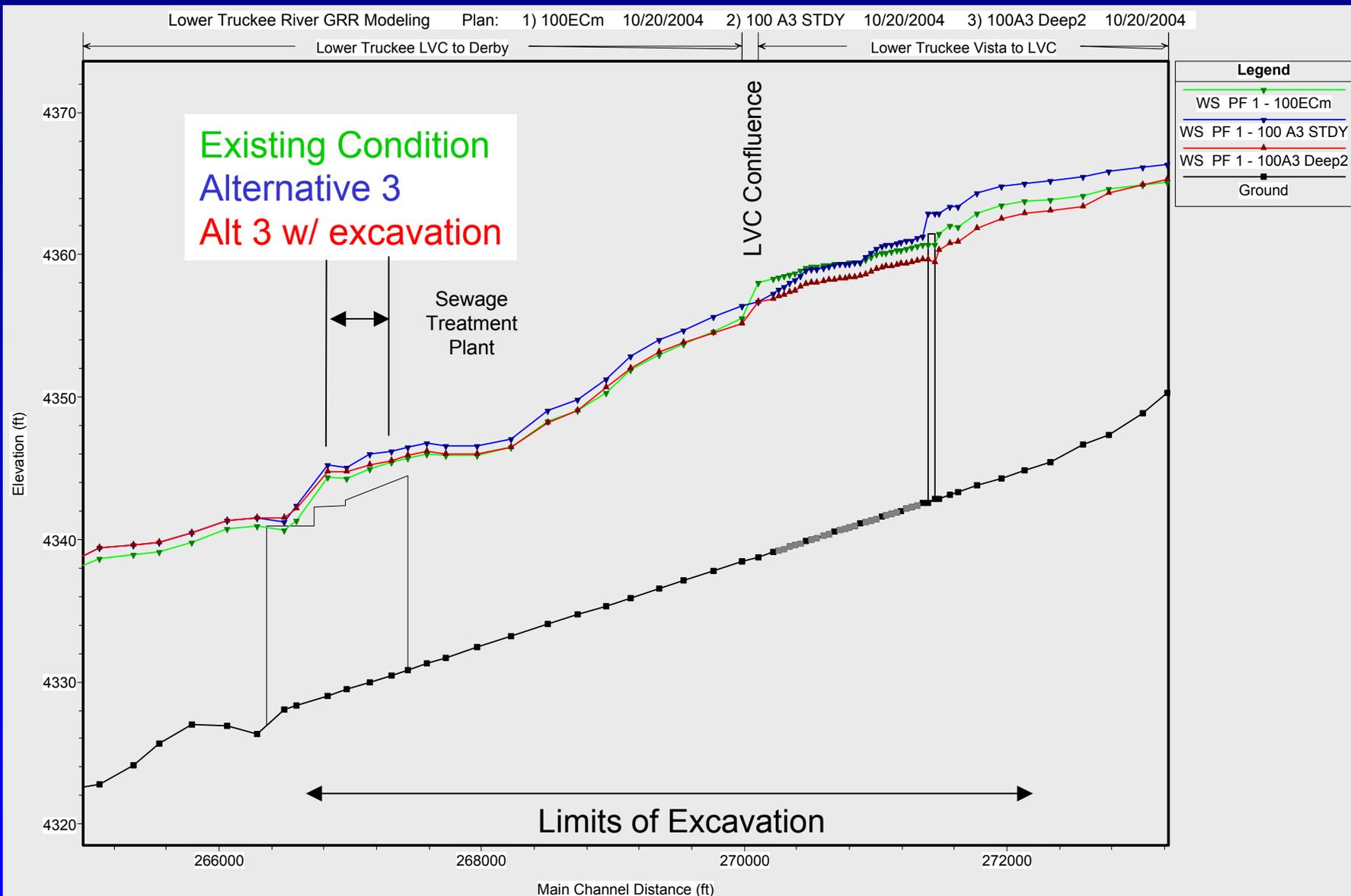


Lower Truckee River: Vista to Wadsworth HEC-RAS Modeling: Excavate Channel Bottom



Lower Truckee River: Vista to Wadsworth

HEC-RAS Modeling: Excavate Channel Bottom



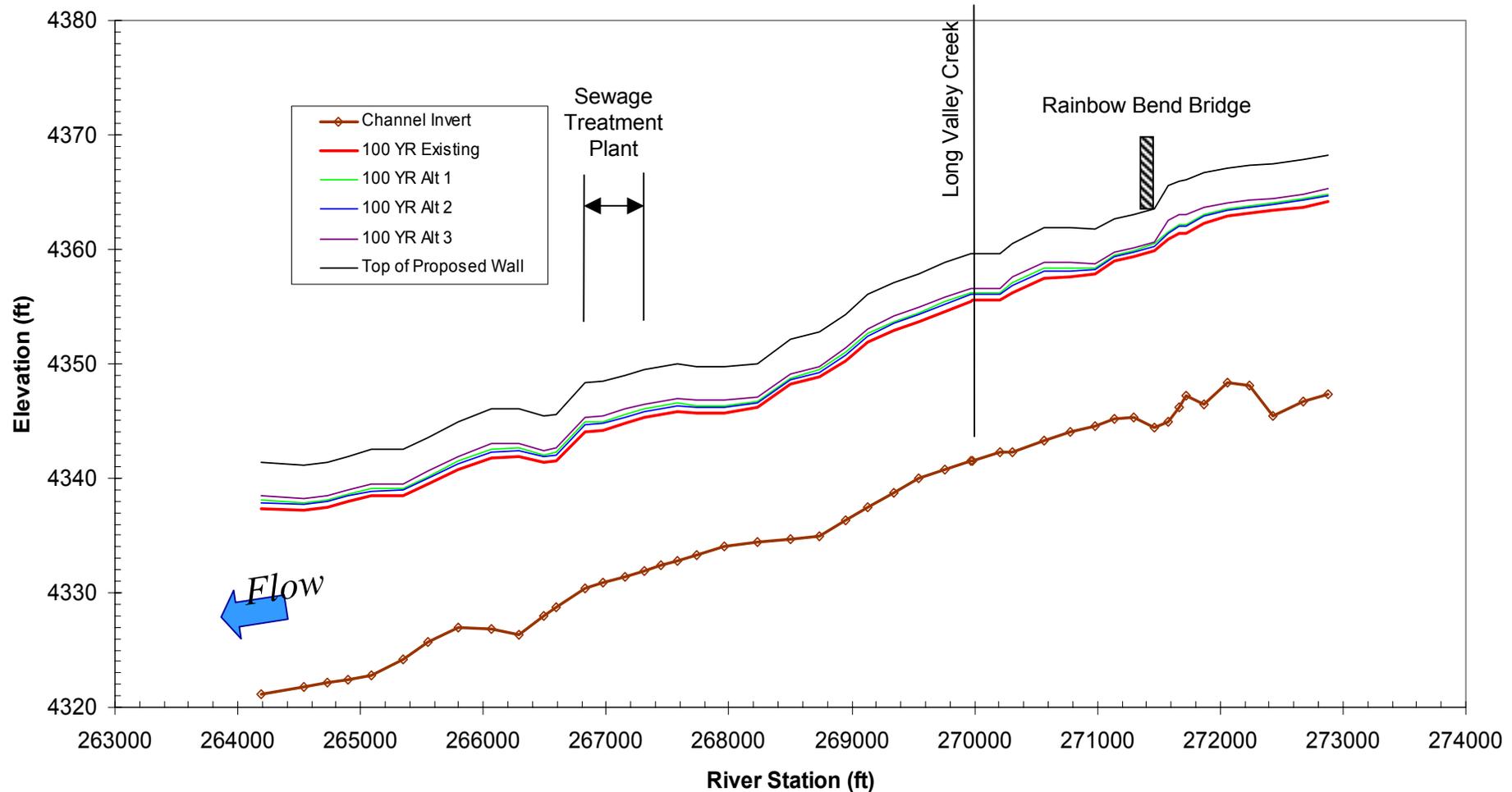
Lower Truckee River: Vista to Wadsworth

HEC-RAS Modeling

- Third potential measure: Construct floodwall /levee/raise road adjacent to Rainbow Bend

Lower Truckee River: Vista to Wadsworth

Top of Floodwall or Levee at Rainbow Bend

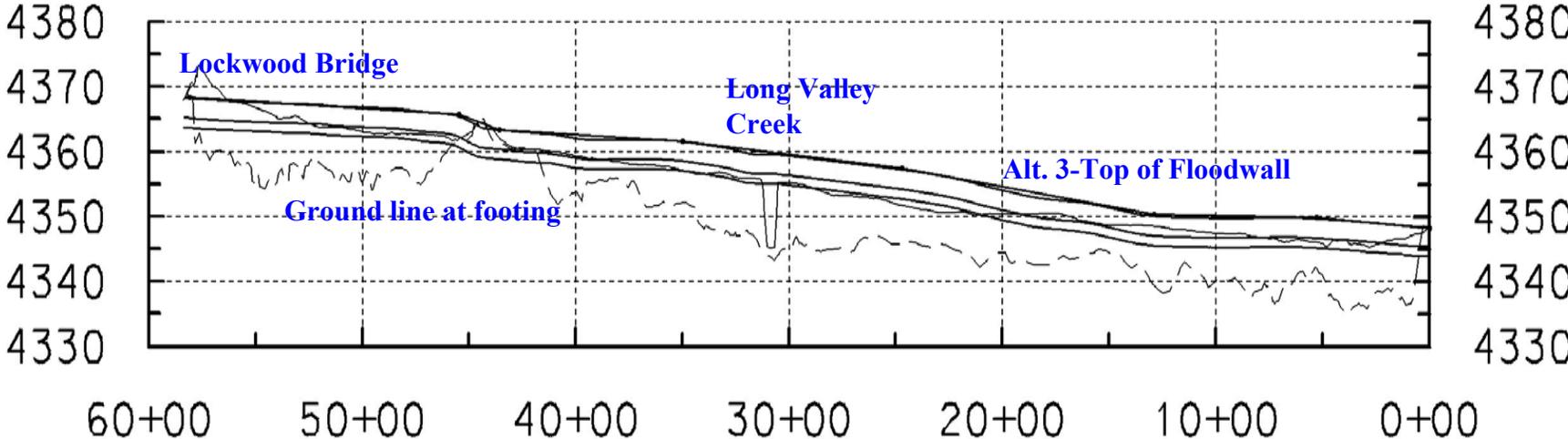


Truckee Meadows Flood Control Project



**Containment/Dredging
Measures at Lockwood**

Truckee Meadows Flood Control Project



TRUCKEE RIVER AT LOCKWOOD

Lower Truckee River: Vista to Wadsworth Painted Rock Access Bridge

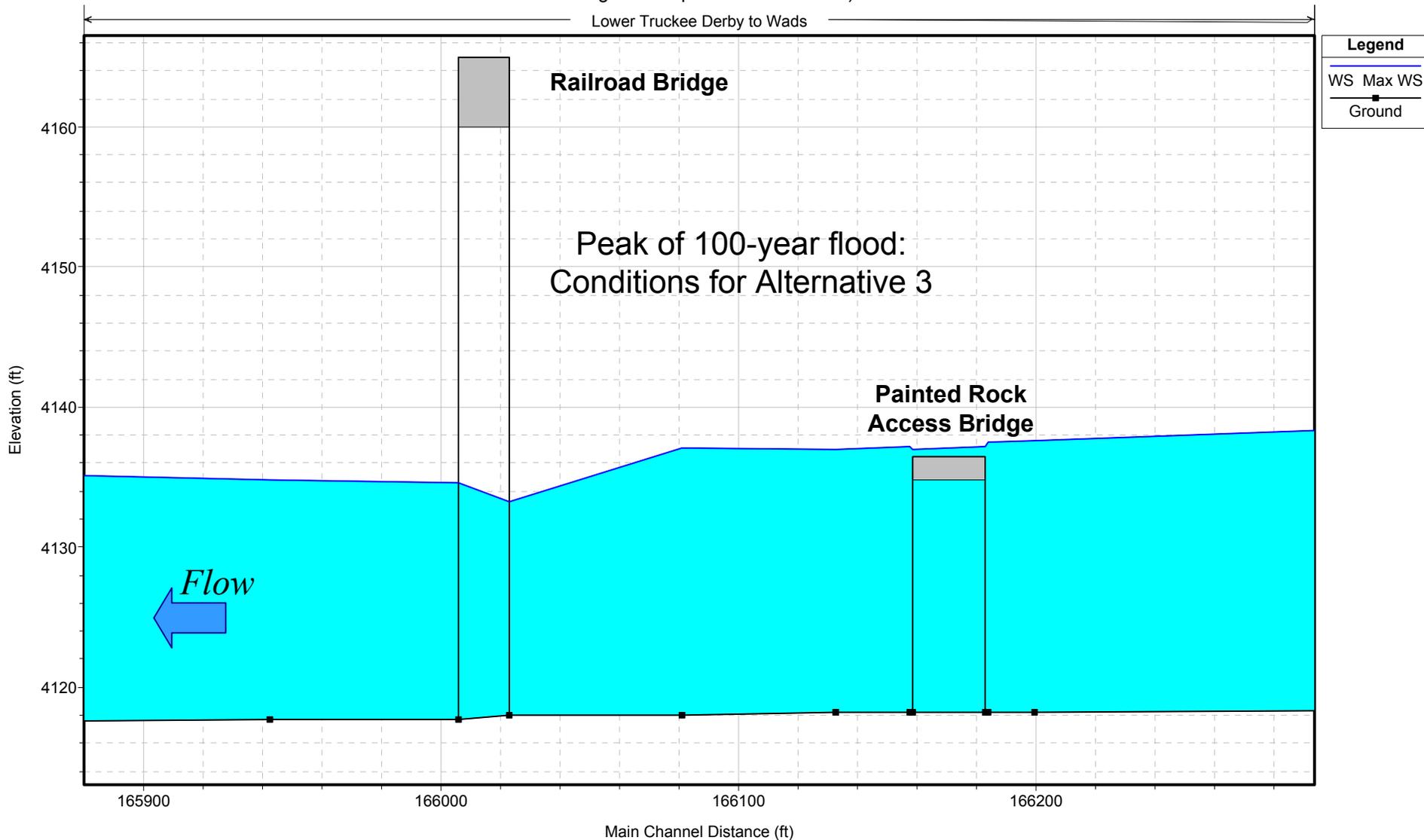


Lower Truckee River: Vista to Wadsworth
Railroad Bridge Downstream of Painted Rock Access
Bridge



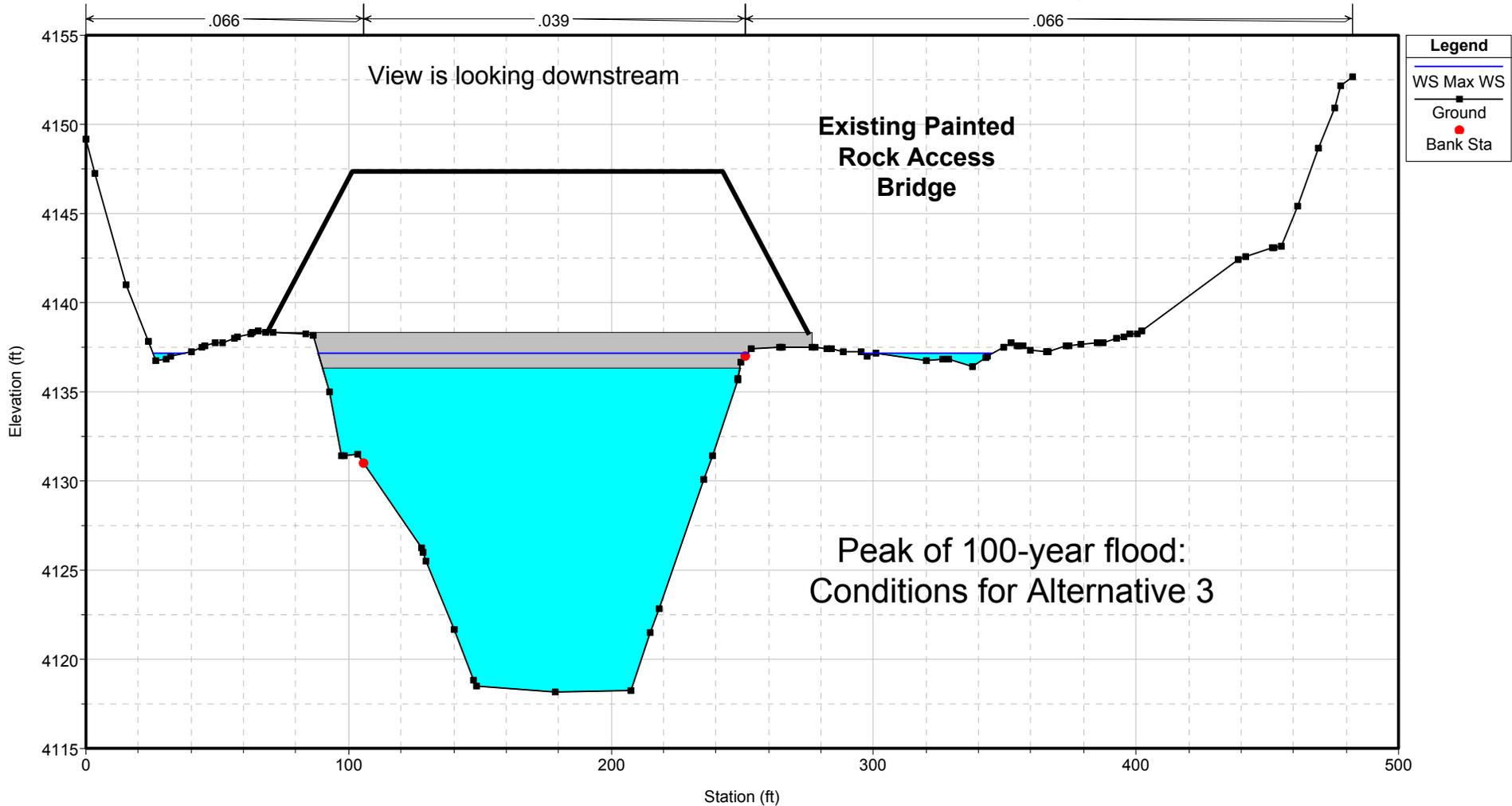
Lower Truckee River: Vista to Wadsworth 100-yr Profile at Painted Rock Access Bridge

Lower Truckee GRR Modeling Other Options Plan: 1) 100 A3 Wads 1/23/2005



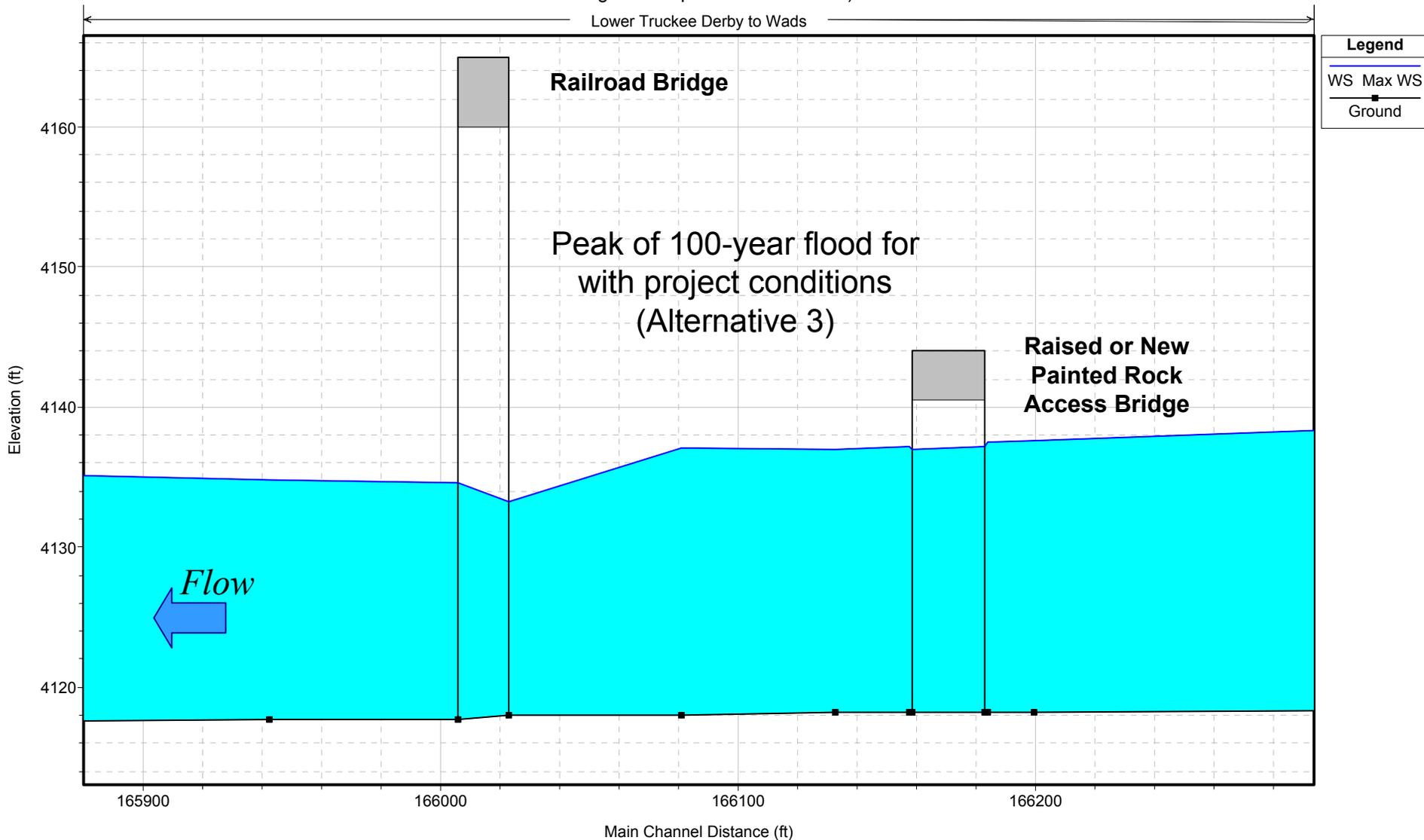
Lower Truckee River: Vista to Wadsworth 100-yr Profile at Painted Rock Access Bridge

Lower Truckee GRR Modeling Other Options Plan: 1) 100 A3 Wads 1/23/2005
River = Lower Truckee Reach = Derby to Wads RS = 166172 BR Painted Rock Bridge



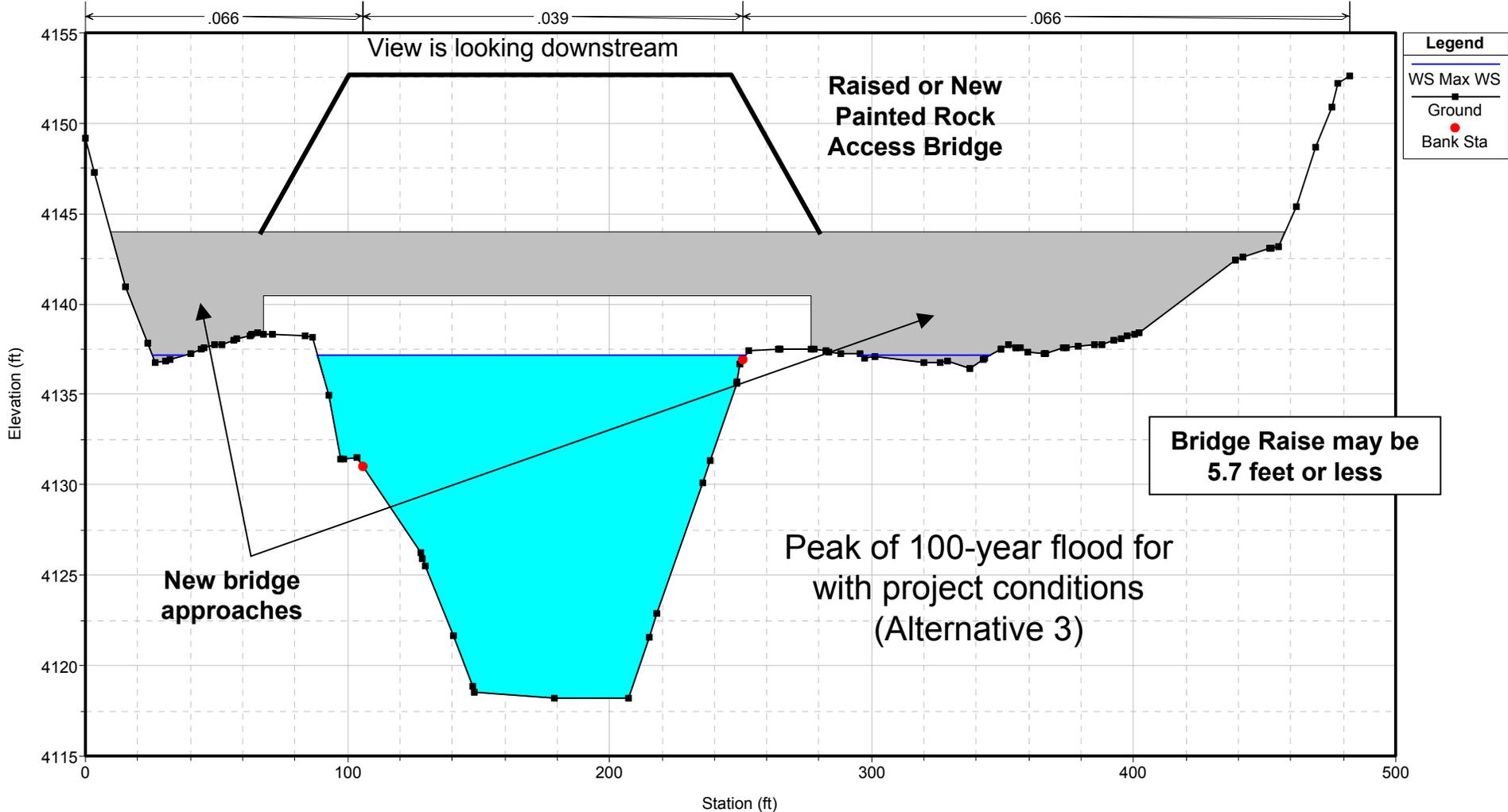
Lower Truckee River: Vista to Wadsworth 100-yr Profile at Painted Rock Access Bridge

Lower Truckee GRR Modeling Other Options Plan: 1) 100 A3 Wads 1/23/2005



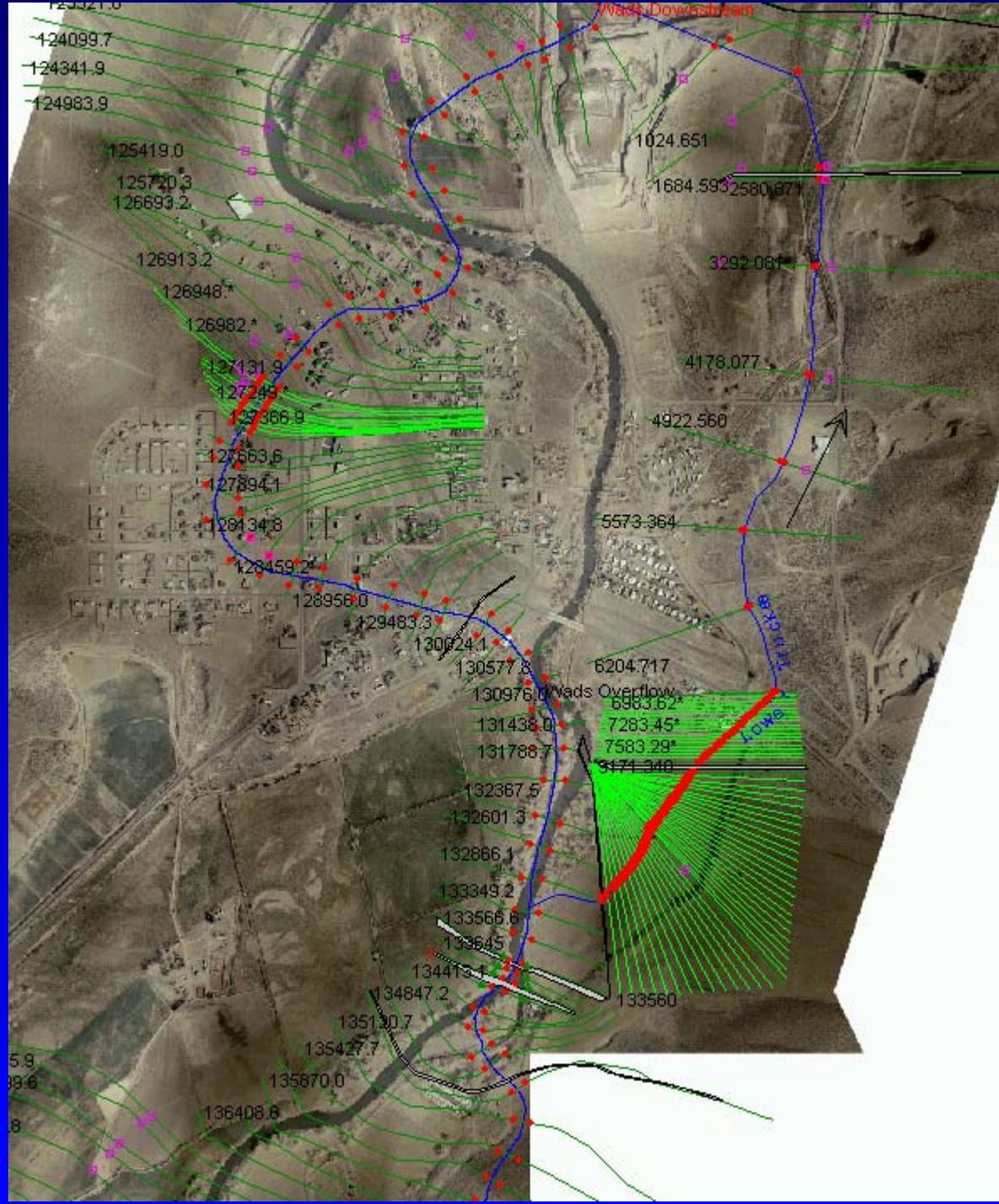
Lower Truckee River: Vista to Wadsworth 100-yr Profile at Painted Rock Access Bridge

Lower Truckee GRR Modeling Other Options Plan: 1) 100 A3 Wads 1/23/2005
 River = Lower Truckee Reach = Derby to Wads RS = 166172 BR Painted Rock Bridge



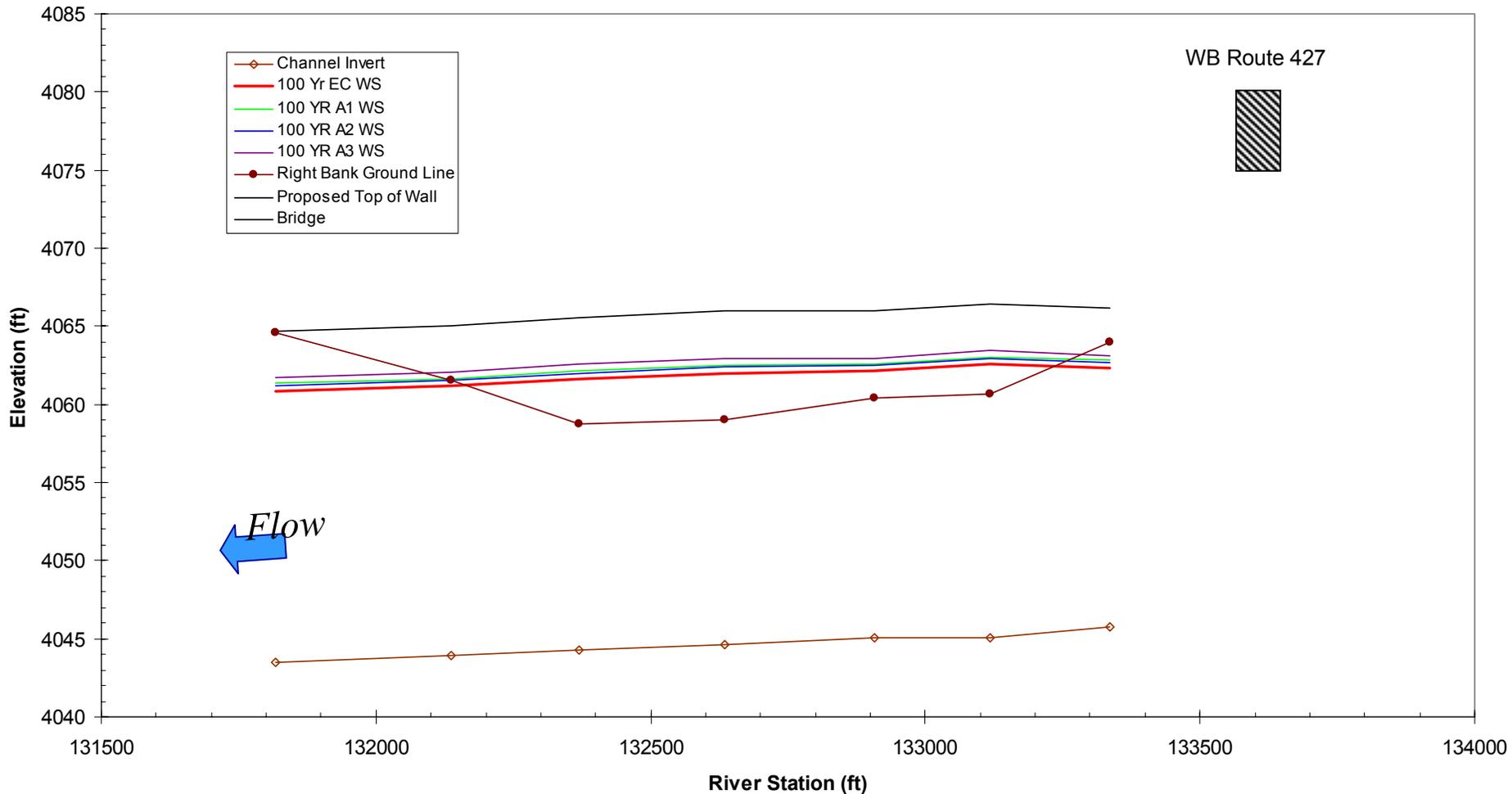
Lower Truckee River: Vista to Wadsworth

HEC-RAS Model at Wadsworth



Lower Truckee River: Vista to Wadsworth

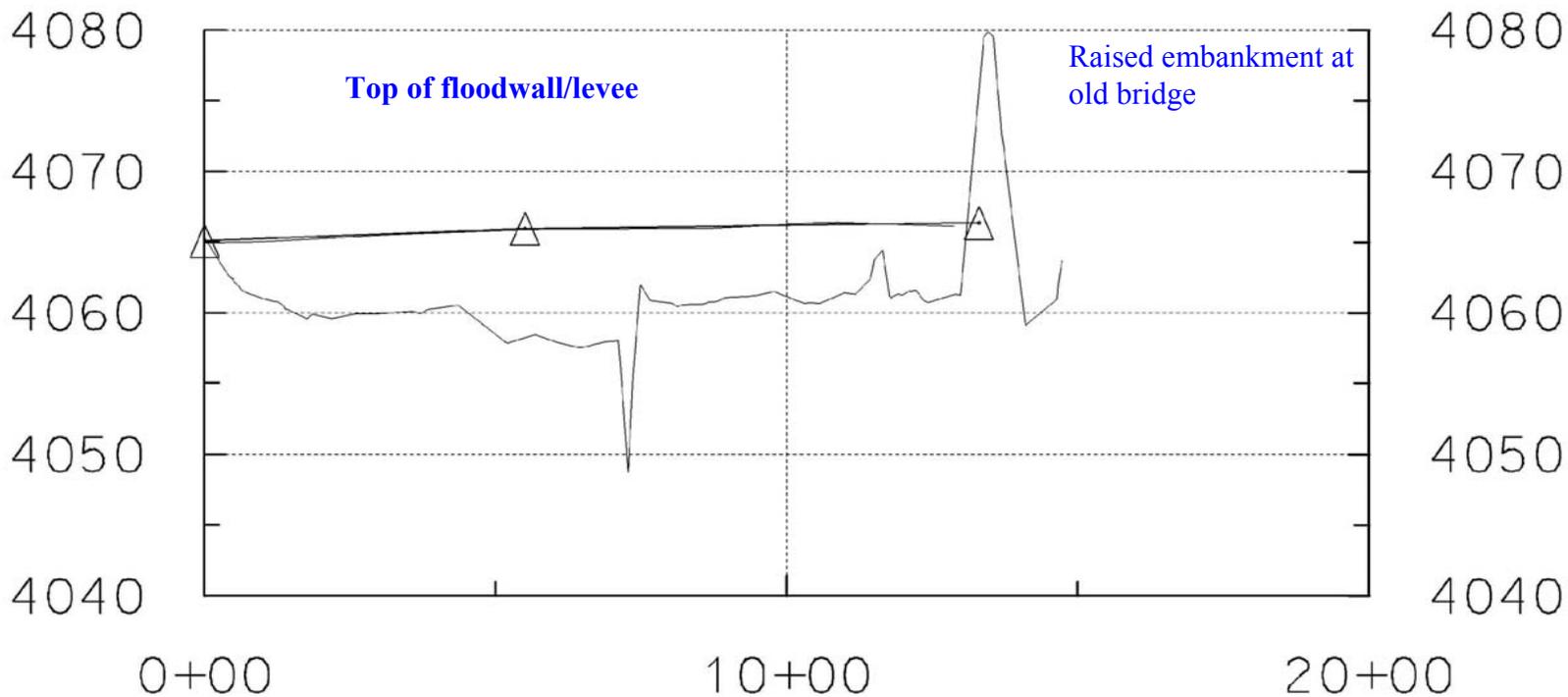
Top of Floodwall or Levee at Wadsworth



Containment Measure at Wadsworth



Truckee Meadows Flood Control Project

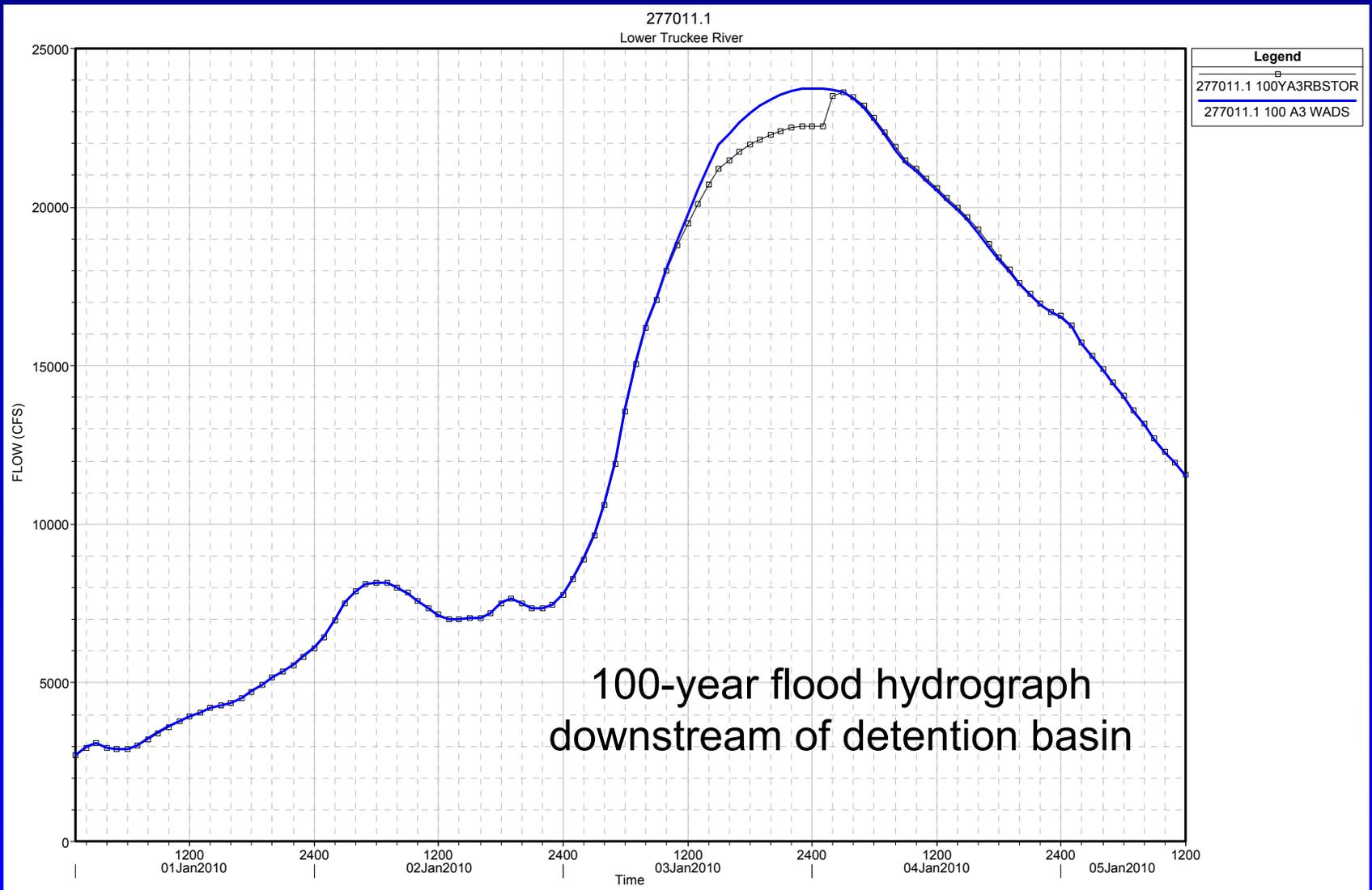


TRUCKEE RIVER
AT WADSWORTH

Truckee Meadows Flood Control Project

Hydraulic Analysis of
Potential Measures for the
Vista to Wadsworth Reach

Lower Truckee River: Vista to Wadsworth Proposed Lockwood Detention Basin



Long Valley Creek

- Community of Rainbow Bend within FEMA 100-year floodplain
- Preliminary Economics data indicates \$400,000 project might be feasible
- Additional hydraulic modeling needed
- Economics analysis still needed
- Decision on who would sponsor and how to proceed still needs to be made

Channel O & M

- Corps has coordinated with Nevada Department of Water Resources.
- Memo has been prepared by Operations Branch to NDWR indicating NDWR has responsibility to clear debris/shoal from channel adjacent to Beasley property.
- NDWR has indicated that it will perform O&M on the lower Truckee River this summer and this area could be included.

Upstream Alternatives

Alt 1	Alt. 2	Alt. 3	Alt. 4	Alt.5	Alt. 6	Alt. 7	Alt. 8
No Benching	No Benching	Benching	No Benching	Benching	No Benching	No Benching	Benching
	Mustang	Mustang	No Mustang	No Mustang	No Mustang	No Mustang	No Mustang
	UNR	Huffaker	UNR	Huffaker	Expanded UNR	UNR	No UNR
	Huffaker		Huffaker		Huffaker (?)	Expanded Huffaker	Expanded Huffaker

Schedule

- Alternatives Formulation Briefing – June 05
- Draft Document to Public – September 05