

SECTION 35

HYDROLOGIC RECLAMATION PLAN

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LIST OF REVISIONS DURING PERMIT TERM

REV.		DATE
NUMBER	REVISION DESCRIPTION	APPROVED

SECTION 35 HYDROLOGIC RECLAMATION PLAN

The objective of the hydrologic reclamation plan and associated mitigation measures is to minimize disturbance to the hydrologic balance within and adjacent to the No Name Permit (NNP) area and to prevent material damage to the hydrologic balance outside the permit area. This hydrologic reclamation plan has been developed in a sequential approach starting with the baseline hydrologic information, the mine plan, and the initial assessment of the probable hydrologic consequences (PHC) (Section 41). The hydrologic reclamation plan includes the measures taken during and after proposed mining to ensure attainment of the hydrologic performance standards. The PHC assessment describes the process for estimating hydrologic impacts and documents any remaining unmitigated impacts.

35.1 Drainage and Sediment Control Structures Removal and Reclamation

The drainage and sediment control structures, identified in Section 25 (Sediment Control Plan) and Section 26 (Drainage Control Plan), will be removed and reclaimed once the structures are no longer needed to manage surface water runoff and sedimentation within a watershed. The area of these structures will be regraded according to the FSC to provide for positive drainage, then topdressed and according to the topsoil redistribution plan and revegetation plan presented in Section 36 (Post-Reclamation Soil) and Section 37 (Post-Reclamation Vegetation), respectively. Once the regraded areas have been reclaimed and erosion rates are less than or equal to the pre-mine rates, the areas will be reconnected to the fluvial geomorphic-appropriate drainages that surround the mine permit area in accordance with 40 CFR part 434 Subpart H. The anticipated reclamation date for the drainage and sediment control structures is provided in Table 26.2-1.

Navajo Transitional Energy Company (NTEC) may take advantage of temporary drainage and sediment control structures to opportunistically establish small area depressions during the FSC regrading. The creation of these small area depressions will enhance post-mining topographic diversity, act as seasonal surface water collection sites, and create microhabitats for post-reclamation wildlife and vegetation communities. Small area depressions have specific design criteria, presented in Section 34 (Post-Reclamation Topography), and unlike permanent impoundments do not require design approval from the Office of Surface Mining Reclamation and Enforcement (OSM) prior to construction. However, OSM must authorize the retention of small depressions prior to bond release.

35.1.1 Sedimentation Ponds and Siltation Structures Removal and Reclamation

Sedimentation ponds and siltation structures are intended to manage and retain runoff and sediment from disturbed areas. NTEC will remove the sediment control ponds and siltation structures by regrading all dams, berms, ditches, and embankments into the FSC to provide for positive drainage. In cases where the sediment contained in the pond or siltation structure cannot be graded into the FSC, the material will be transported and placed in the mine pit or other designated area. Non-earthen materials, such as geotextiles

and pond liners, will be removed and disposed of with non-coal solid waste materials in accordance with the procedures presented in Section 20 (Mining Operations) and applicable regulations.

35.1.2 Temporary Impoundments Removal and Reclamation

Temporary impoundments are structures intended to minimize surface water inflows from undisturbed areas (e.g., highwall impoundments). NTEC will remove all temporary impoundments by regrading the associated dams, berms, ditches, and embankments into the FSC to provide for positive drainage. In cases where the sediment contained in the temporary impoundment cannot be graded into the FSC, the material will be transported and placed in the mine pit or other designated area. Non earthen materials, such as geotextiles and pond liners, will be removed and disposed of with non-coal solid waste materials in the procedures presented in Section 20 (Mining Operations) and applicable regulations.

35.1.3 Temporary Diversions Removal and Reclamation

The drainage control plan for NNP, presented in Section 26, contains two categories of temporary diversions; intermittent stream diversions and miscellaneous flow diversions. The Pinabete Diversion and East Diversions have been designed to convey the flows from the upstream watersheds of Pinabete Arroyo around the Area 4 South mining area. Pinabete Arroyo is an ephemeral stream by nature; however, based on its watershed size (greater than 1sq mi) it is classified by OSM as an intermittent stream. Miscellaneous flow diversions are diversion structures that have a watershed less than 1sq mi. These miscellaneous flow diversions are generally used for site-specific drainage control plans, such as diverting surface flows around structures or facilities. Further discussion on temporary diversions, including their anticipated reclamation dates, is provided in Section 26 (Drainage Control Plan).

Temporary diversions, identified in the drainage control plan (Section 26), will be removed when they are no longer needed to convey surface water around disturbance areas. Material that was stockpiled during construction of a temporary diversion may be used during the removal and reclamation process. All berms, ditches, embankments, and unused stockpiled materials will be graded into the FSC. The area will be topdressed and seeded according to the topsoil redistribution plan and revegetation plan presented in Section 36 (Post-Reclamation Soil) and Section 37 (Post-Reclamation Vegetation), respectively. In cases where the sediment contained in the temporary diversion or its attenuation structures cannot be graded into the FSC, the material will be transported and placed in the mine pit or other designated area. To the extent practicable, all riprap will be removed and recycled for beneficial use in other parts of the operation. Non earthen materials such as geotextiles, gabion baskets, and liners, will be removed and disposed of with non-coal solid waste materials in accordance with the procedures presented in Section 20 (Mining Operations) and applicable regulations.

35.1.4 Removal and Reclamation of Other Drainage and Sediment Control Structures

During mining and reclamation operations, NTEC will use best technology currently available (BTCA) measures, including but not limited to diversion, berms, rock-lined down drains, riprap, silt fences, straw bales, and fiber rolls, to control surface water drainage and sediment transport. Further information on the sediment control plan is presented in Section 25. These same measures are known as best management practices (BMP) under Clean Water Act permitting. The two terms, BTCA measures and BMP, may be used interchangeably within this permit application package (PAP). These measures will be removed and reclaimed when they are no longer needed to control drainage and sediment from disturbed areas. These structures, along with a description of their construction, operation, use, maintenance, and approximate removal and reclamation dates, are identified in the sediment control and drainage control plans contained in Sections 25 and 26. When BTCA measures are replaced or are no longer needed they will be removed and disposed of with non-coal solid waste in accordance with the procedures presented in Section 20 Mining Operations and applicable regulations. Inert material, such as rock riprap, may be recycled for other BTCA measures or placed within the mine backfill material. Sediments and earthen materials associated with the BTCA measures will be handled as previously described in this section. Non-earthen materials, such as geotextiles and straw bales, will be removed and disposed of with non-coal solid waste materials in accordance with the procedures presented in Section 20 Mining Operations and applicable regulations. The disturbed areas associated with the BTCA measures will be topdressed and seeded.

35.2 Post-reclamation Drainage

NTEC utilizes fluvial geomorphic reclamation approaches as detailed in Section 34 (Post-Reclamation Topography) and Section 38 (Post-Reclamation Surface Stabilization and Sediment Control) to design the FSC. The fluvial geomorphic reclamation approach utilizes site-specific fluvial geomorphic data, including but not limited to drainage density, tributary lengths and associated areas, sinuosity, width to depth ratios, and length between channels, to develop a FSC that conveys waters and sediment in manner and volume comparable with pre-mine conditions. The combination of these approaches enables NTEC to meet the objectives of the FSC as described below:

1. Achieve mass balance while maximizing contemporaneous regrade acreage between ramps,
2. Achieve positive drainage from all areas including pits and ramps,
3. Develop an adequate drainage density,
4. Allow development of stable drainage channels,
5. Support the approved post-mining land use.

To the extent practicable, the post-reclamation watersheds have been designed to be comparable in size and have confluence locations similar to the pre-mining watersheds. The portion of the Pinabete Arroyo watershed intercepted by mining will be restored and the arroyo reconstructed after mining activities are complete. Adjacent ephemeral drainages to Pinabete Arroyo or other drainages will be reconstructed, using

fluvial geomorphic principles, from the confluence with the undisturbed channel and designed channel. The drainage pattern and alignment of the reconstructed Pinabete Arroyo will differ slightly as a result of mining activities.

NTEC is not requesting a variance for mountain-top removal operations, or steep slope mining as these are not applicable to NNP.

35.2.1 Post-reclamation Watersheds

The post-reclamation watersheds were delineated in a similar manner as the pre-mine watersheds presented in Section 18 (Water Resources). Post-reclamation watersheds and subwatersheds were delineated for each of the major arroyos including Pinabete Arroyo, No Name Arroyo, Brimhall Wash and tributaries to the Chaco River, within and adjacent to the permit area based on the FSC digital elevation models (DEMs). These delineations were used in SEDCAD™ 4 (SEDCAD) modeling to determine flood flows and sediment yields for the post-reclamation watershed and subwatershed conditions (Appendix 41.D). The SEDCAD modeling also allows for comparison of pre-mining and post-reclamation watershed conditions. The results of this comparison, discussed in Section 41 (Probable Hydrologic Consequences), indicate little change in surface flows and sediment yield following reclamation relative to the pre-mine watershed conditions. Exhibit 34.3-1 and Exhibit 34.3-2 presents the post-reclamation SEDCAD watershed delineations and FSC contours for the permit area.

35.2.2 Post-reclamation Drainage Structures

NTEC does not plan to leave any temporary sedimentation ponds and/or impoundments as post-reclamation drainage structures. Permanent impoundments, which function as post-reclamation drainage structures, are discussed in Section 35.2.4.

Temporary post-reclamation BMPs (e.g., silt fences, straw bales, or fiber rolls) may be used as needed to comply with applicable National Pollutant Discharge Elimination System (NPDES) regulations. These BMPs will be removed once they are no longer needed and prior to full bond release.

The pre-mine NNP permit area is bisected by two ephemeral drainages, Pinabete Arroyo and No Name Arroyo. These drainages only flow in response to precipitation events or occasionally from snow-melt runoff. However, these drainages are classified as intermittent stream channels based on the definition provided in 30 CFR 701.5. Utilizing fluvial geomorphic principles and implementing the surface stabilization and sediment control plan presented in Section 38 (Post-Reclamation Surface Stabilization and Sediment Control), NTEC will reconstruct portions of these drainages and their tributaries impacted by mining and reclamation activities. These measures, both of which rely on scientifically proven engineering practices, emphasize landform construction and erosion controls to achieve sediment-control goals. The

reconstructed drainages within the permit area and the associated post-reclamation SEDCAD watersheds are presented on Exhibit 34.3-2.

A permanent drainage control structure designed to mitigate a headcut feature will be installed within the No Name Arroyo channel. This structure is described in Section 35.7.1.

35.2.2.1 Reconstructed Intermittent Stream Channels

The reconstructed reach of Pinabete Arroyo (Exhibit 34.3-2.02) will collect and convey the same watershed area as the pre-mine reach, although the upstream watersheds will confluence with the arroyo channel in different locations than the pre-mine arroyo. The second west tributary will collect and convey surface waters from the majority of the west side of the permit area. The first east tributary will tie in with six sizeable watersheds upstream and to the east of the permit area.

35.2.2.1.1 Pinabete Arroyo Stream Channel Reconstruction Design Plan

Pinabete Arroyo channel reconstruction design assumptions and details are discussed in Appendix 34.A and summarized below. Pinabete Arroyo was classified as a Rosgen Type C5c channel during the baseline evaluation (Appendix 34.A). This designates that the channel has a slope less than 1 percent, a sinuosity greater than 1.2, and a width to depth ratio greater than 12. The reconstructed (i.e., reclaimed) channel was designed as a Rosgen Type C5c channel to match both the upstream and downstream channel characteristics, acknowledging that the reconstructed channel needs to be able to migrate somewhat within the valley area to maintain dynamic equilibrium with undisturbed reaches. The channel design consists of a defined bed and bank to contain the 2yr-1hr storm event and a flood-prone area to contain the 50yr-6hr storm event in accordance with the fluvial geomorphic approach described in Section 38 (Post-Reclamation Surface Stabilization and Sediment Control). Storm events larger than the 50yr-6hr event will leave the defined bed and bank zone and spread across the floodplain valley area. This configuration is compatible with the baseline channel behavior as evidenced by the large, shallow floodplain and high-water debris lines that were noted during baseline data collection (Appendix 34.A). The peak discharges through Pinabete Arroyo were determined using the Soil Conservation Service (SCS) unit hydrograph methodology in conjunction with the United States Army Corps of Engineers (USACE) HEC-HMS model (version 3.0.0), because this method provided values most comparable to baseline conditions (Appendix 34.A). This resulted in an estimated 1,350 cubic feet per second (cfs) discharge rate for the 2yr-1hr event and 4,500 cfs discharge rate for the 50yr-6hr event. The channel is designed to pass these flows at a maximum discharge velocity of 4.5 feet per second (fps).

The reconstructed channel will follow a path similar to the original path but will be slightly offset to the west due to mining advancing from west to east. The slope and elevation of the reconstructed Pinabete Arroyo channel will tie in both upstream and downstream with the undisturbed Pinabete Arroyo channel.

As described in Section 38 Post-Reclamation Surface Stabilization and Sediment Control, there may be reaches along the reconstructed channel and adjacent to tie-in locations where transient aggradation, degradation, and bank erosion may occur to a degree that is commensurate with natural fluvial geomorphic processes and dynamic equilibrium adjustments. The alignment, profile and cross sections of the reconstructed Pinabete Arroyo channel are provided in Section 34.3-2.

NTEC will reestablish a bed of coarse-textured alluvial type material within the defined bed and bank area of the reconstructed channel to support the hydrologic recovery and groundwater recharge capacity of the watershed, as discussed in Section 41 (Probable Hydrologic Consequences). Although the floodplain will be revegetated, the flood-prone and bank-full areas will not be directly revegetated to ensure that vegetation encroachment does not impact the long-term stability and performance of the reconstructed channel. Further discussion on the post-reclamation vegetation and the revegetation plan is provided in Section 37 (Post-Reclamation Vegetation). During the mining and reclamation processes, sediment control and drainage control structures will be used in line with or adjacent to the reconstructed channel to maintain compliance with all applicable federal, state, and tribal water quality regulations. These structures are discussed in Section 25 (Sediment Control Plan) and Section 26 (Drainage Control Plan). The sediment and drainage control structures will be removed in accordance with Section 35.1 when appropriate.

NTEC may reestablish a bed of coarse-textured alluvial type material within the defined bed and bank area of the lower reach of East 1 near the confluence with the reconstructed Pinabete Arroyo channel to support the hydrologic recovery and groundwater recharge capacity of the watershed, as discussed in Section 41 Probable Hydrologic Consequences. The floodplain will be revegetated, but the flood-prone and bank-full areas will not be directly revegetated to ensure that vegetation encroachment does not impact the long-term stability and performance of the reconstructed channel. Further discussion on the post-reclamation vegetation and the revegetation plan is provided in Section 37. To the extent practicable, the bottoms of swales will be revegetated. During the mining and reclamation processes, sediment control and drainage control structures will be used in line with or adjacent to the reconstructed channel to maintain compliance with all applicable federal, state, and tribal water quality. These structures are discussed in Section 25 Sediment Control Plan and Section 26 Drainage Control Plan. The sediment and drainage control structures will be removed when appropriate as discussed earlier in this section.

35.2.2.1.4 No Name Arroyo Reconstructed Channel Design Plans

Mining and reclamation activities require the construction of the temporary Pinabete Diversion, presented in Section 26 (Drainage Control Plan), to convey surface flow around the disturbance area and into No Name Arroyo. The Pinabete Diversion will be removed and reclaimed once the mining and reclamation activities are complete in Area 4 South. The segment of the No Name Arroyo channel that was disturbed during construction and operation of the Pinabete Diversion will be reclaimed at this time.

The alignment of the reconstructed No Name Arroyo channel coincides with the undisturbed channel. The channel section is proportioned to have both a pilot and main channel. The reconstructed channel alignment are presented in Exhibit 34.1-1. The flows equal to and less than the 2yr-6hr precipitation event will be contained in the pilot channel and flows from larger precipitations will overflow into the main channel.

Using HEC-RAS computer software, the channel flow velocities of the undisturbed and reconstructed No Name Arroyo channel were compared to determine if the stability of the reconstructed channel is equal to or better than the undisturbed channel. In this comparison, the channel with the lower velocity will be more stable. The baseline and post-reclamation peak flows from the 2yr, 10yr, 25yr, and 100yr-6hr-precipitation events were used in the analysis. For each precipitation event, the maximum and average velocities in the reconstructed channel are less than the undisturbed channel (Table 35.2-1), indicating the reconstructed channel is more stable. The lower-flow velocities in the reconstructed channel are also due to the reduced peak flows of the post-reclamation modeling. Detailed results of the HEC-RAS analysis for the undisturbed and reconstructed channels are presented in Appendix 35.A and Appendix 35.B, respectively.

35.2.2.2 Reconstructed Miscellaneous Flow Stream Channels

There are seven minor tributaries and subwatersheds to Pinabete Arroyo and two other minor tributaries and subwatersheds to unnamed tributaries of Pinabete Arroyo and No Name Arroyo that will be reconstructed in the permit area (Exhibit 34.1-1). All these tributaries function as ephemeral streams and have watershed sizes less than 1 sq mi, classifying them as miscellaneous flow channels.

These minor tributaries will have steeper channel profiles and the subwatersheds will have smaller drainage areas than the channels described under Section 35.2.2.1. The channel profile will be concave and tie in with the reconstructed Pinabete Arroyo and tributaries to Pinabete and No Name arroyos at slopes that support long-term stability. The head elevation and head slope will vary based on the topography established after backfilling and grading of the adjacent areas. The design and construction of the miscellaneous flow channels will follow the fluvial geomorphic principles outlined in Section 38 Post-Reclamation Surface Stabilization and Sediment Control. The channel type will reflect a Rosgen Type A or Type C classification depending on slope. The channels will contain up to the 50yr-6hr event within a defined bed and bank or valley channel, as appropriate. NTEC may reestablish a bed of coarse-textured alluvial type material within the defined bed and bank area of the lower reaches near the confluence with the reconstructed Pinabete Arroyo channel to support the hydrologic recovery and groundwater recharge capacity of the watershed, as discussed in Section 41 Probable Hydrologic Consequences. NTEC will not reestablish a bed of coarse-textured alluvial type material in the upper reaches of these minor tributaries. The minor tributary subwatersheds will be revegetated similar to the reconstructed intermittent stream

channels. The floodplain will be revegetated; the flood-prone and bank-full areas will not be directly revegetated to ensure that vegetation encroachment does not impact the long-term stability and performance of the reconstructed channel. Further discussion on the post-reclamation vegetation and the revegetation plan is provided in Section 37 Post-Reclamation Vegetation. To the extent practicable, the bottoms of swales will be revegetated. During the mining and reclamation processes, sediment control and drainage control structures will be used in line with or adjacent to the reconstructed channel to maintain compliance with all applicable federal, state, and tribal water quality. These structures are discussed in Section 25 Sediment Control Plan and Section 26 Drainage Control Plan. The sediment and drainage control structures will be removed when appropriate as discussed earlier in this section.

35.2.3 Permanent Diversions

NTEC does not plan to leave any permanent diversions in place once reclamation activities and bond release are complete. Therefore, this section does not apply to NNP.

35.2.4 Permanent Impoundments

NTEC does not plan to leave any permanent impoundments after reclamation activities are complete and bond release has been obtained. Therefore, this section does not apply to NNP.

Refer to Section 35.5 for a discussion of the protection and replacement of water rights of present users and to Section 33 (Post-Reclamation Roads, Buildings, Facilities, and Other Structures) for details on the construction of replacement water resources.

35.3 Acid and Toxic Drainage Control

Based on the overburden characterization study presented in Section 17 (Geologic Information), NTEC does not anticipate the need to treat any acid or toxic drainage during mining or reclamation operations in the post-reclamation environment. The study concluded that there were no widespread occurrences of potentially acid-or toxic-forming materials (PATFM) present in the permit area. Therefore, these materials will not require any special handling or disposal procedures. The small quantities of PATFM and other material unsuitable for plant growth will be placed in mined-out areas and handled in a manner that protects the environmental resources and will not impact surface drainages or the FSC. The placement of this material is discussed in Section 20 (Mining Operations) and Section 34 (Post-Reclamation Topography).

NTEC will conduct surface and groundwater monitoring according to the monitoring plans provided in Section 42 (Monitoring, Maintenance, Inspections, and Examinations).

35.4 Restoration of Ground Water Recharge Capacity

Mining and reclamation activities in the permit area will increase the recharge capacity of the disturbed area because the in-situ strata are replaced with unconsolidated backfill (Section 41, Probable Hydrologic Consequences). This unconsolidated backfill has a higher hydraulic conductivity than the undisturbed strata. No special effort will be required to restore the groundwater recharge capacity from surface infiltration over the general disturbance area. Efforts will be made to establish an alluvial channel bed for the reconstructed Pinabete Arroyo to restore alluvial recharge capacity. The post-reclamation groundwater recharge capacity is discussed in Section 41 (Probable Hydrologic Consequences).

As described in Section 41 (Probable Hydrologic Consequences) and summarized in Table 41.3-2, the modeled post-reclamation recharge rate estimate for the permit area is 0.041 in per yr. This is about twice the pre-mining groundwater recharge rate discussed in Section 18 (Water Resources) and summarized in Table 41.3-2. The pre-mining groundwater recharge rate for Area 4 South is 0.020 in per yr and for Area 5 is 0.019 in per yr. Groundwater modeling predicts it may take as long as 500 years for the mine backfill to reach a final steady-state potentiometric level. The post-reclamation groundwater recharge capacity and rates and steady-state groundwater modeling were determined as part of the probable hydrologic consequences assessment and are discussed in greater detail in Section 41.

35.5 Protection and Replacement of Water Rights of Present Users

NTEC holds water rights Surface Permit Number 2838 issued by the New Mexico Office of the State Engineer. This diversionary surface water usage is for irrigation of reclaimed areas of the mine, dust suppression, potable water after suitable treatment, and other appropriate uses.

During mining development, NTEC will disrupt surface water availability to ephemeral or intermittent impoundments and an alluvial well used for livestock watering (Exhibit 18.1-2). The use of the livestock impoundment features is limited by the availability of sufficient water from precipitation events and the naturally poor quality of the surface water. Pre-mining water resource information is provided in Section 18. NTEC will provide alternative sources for livestock watering (e.g., water tanks) to customary land users holding grazing permits for affected areas within the NTEC lease. NTEC will replace the lost water sources should NTEC find that the water users are still in need of the sources that existed pre-mine. Should the customary land user require alternative water sources after reclamation, NTEC may replace livestock impoundments and the alluvial well affected by mining with replacement post-reclamation livestock impoundments or wells, as deemed appropriate by NTEC. The replacement livestock impoundments or wells will provide comparable water quantity and quality for use in livestock watering to pre-mine impoundments and wells. NTEC does not intend for any impoundments or tanks to be used as a source of domestic water, as local sources of surface and groundwater do not meet drinking water standards. NTEC will coordinate with OSM and with customary land users to determine the locations of potential

impoundments or wells as a part of preparations for Phase III bond release. Additional information about these post-reclamation structures is included in Section 33 Post-Reclamation Roads, Buildings, Facilities, and Other Structures. The post-reclamation changes to surface water quantity and quality are presented in Section 41 Probable Hydrologic Consequences.

35.6 Steps to Meet Federal, State, and Tribal Water Quality Laws, Regulations, and Standards

As described in Section 8 (Compliance with Air and Water Quality Laws and Regulations) of this PAP, NTEC will obtain the appropriate coverage under Section 402, which is administered by the U.S. Environmental Protection Agency (EPA) Region 9 for lands within the Navajo Nation; Section 404, which is administered through the USACE; and Section 401 certification administered through the Navajo Nation Environmental Protection Agency (NNEPA) as needed.

NTEC will meet the water quality standards through various practices described throughout this section and following the methods and procedures outlined in Section 25 (Sediment Control Plan) for controlling sediment during surface coal mining and reclamation operations. Constructing stable drainages and surfaces according to the FSC and the post-reclamation surface stabilization and sediment control plan will prevent additional contributions of sediment and suspended solids to drainages within and adjacent to the permit area. Reclaimed drainages and associated watersheds will be reconnected to the natural drainage system (i.e., not affected by mining) in accordance with 40 CFR part 434 Subpart H.

Section 41 (Probable Hydrologic Consequences) describes the analysis and demonstrates how the various mitigation and preventive measures described in this section will ensure NTEC complies with applicable water quality laws, regulations, and standards.

35.7 Steps to Minimize Hydrologic Balance Disturbances and Prevent Material Damage

In accordance with 30 CFR 780.21(h), NTEC is submitting this hydrologic reclamation plan, which has been designed to:

- Minimize to the extent possible disturbances to the hydrologic balance within the permit and adjacent areas;
- Prevent to the extent possible material damage to the hydrologic balance outside the permit area;
- Assure the protection or replacement of water rights; and
- Support the approved post-mining land use.

NTEC will utilize this plan and other sections of the PAP to comply with 30 CFR 816.41 through 816.43 and to prevent to the extent possible adverse impacts to the hydrologic balance within and outside the permit area.

Groundwater Protection and Monitoring

Material unsuitable for plant growth will be placed in mined-out areas and handled in a manner that protects environmental resources and minimizes adverse impacts to the groundwater regime. The measures and procedures to handle this material are discussed in Section 20 (Mining Operations) and Section 34 (Post-Reclamation Topography). The groundwater monitoring plan, presented in Section 42 (Monitoring, Maintenance, Inspections, and Examinations), has been developed to monitor changes in the quantity and quality of the groundwater resource during mining and subsequent reclamation. Baseline groundwater sampling, presented in Section 18 (Water Resource), indicated the potential use of groundwater, i.e. livestock watering, within and adjacent to the permit area is limited due to low permeability and yield and poor water quality. The potential use of groundwater in the reclaimed area will also be negligible due to the low yield and water quality, as discussed in Section 41 (Probable Hydrologic Consequences).

Groundwater model simulations presented in Section 41 (Probable Hydrologic Consequences) show groundwater changes expected from mining and reclamation activities. Removal of the interbedded strata results in a lower water table in the backfilled spoil relative to pre-mining, but higher potentiometric conditions at the base of backfilled pit. The steady-state heads in the mine spoil are much more uniform with depth, in comparison with the large vertical gradients and perched groundwater prior to mining.

Resaturated mine backfill will develop as a result of recharge from precipitation, lateral inflow from the coals and interburden of the Fruitland Formation, and upward flow from the Pictured Cliffs Sandstone (PCS) formation. Although modeled backfill recharge rates were estimated to be twice the pre-mine rate, model results indicate that it may take as long as 500 years for groundwater levels to recover in the backfill to a steady-state condition. Recovery rates may actually be slower if the post-reclamation recharge rates are closer to the pre-mine rates. Groundwater flow will be predominantly toward the backfilled mine pit as water levels recover in the backfill (Section 41, Probably Hydrologic Consequences). Once water levels rise sufficiently in the mine backfill, groundwater will flow at a very slow rate from the backfill into the lower coal seams of the Fruitland Formation, into the PCS, and toward the topographic lows along the alluvial channels of No Name and Pinabete arroyos (Section 41, Probably Hydrologic Consequences).

Transport simulation results show several flow paths from backfilled pits with most flow vertical to PCS, some flow through alluvium of Pinabete and No Name arroyos, and a minor amount of flow downdip through the unmined coals and shales of the Fruitland Formation. Background total dissolved solids (TDS) concentrations in PCS are higher than the TDS levels expected for spoil water. Thus, the primary direction for spoil water migration is into a water-bearing zone that has higher TDS concentrations. Similarly, the TDS concentrations in the lateral flow to the alluvium of Pinabete and No Name arroyos are lower than the baseline TDS concentrations in these hydrogeologic units. However, the TDS concentrations in the alluvium of Pinabete and No Name arroyos are not expected to decrease significantly as a result of mining.

because the contribution from spoil water is much smaller than the contribution from alluvial recharge and upgradient alluvial flows. Likewise, the TDS concentrations in the alluvium of Pinabete and No Name arroyos would not be expected to increase significantly in the event that the TDS concentrations in spoil water are higher than predicted.

The primary factor controlling the fate and transport of water in mine spoils is the extremely low rate of flow from the mine backfill that will occur as a result of the low recharge rates and low hydraulic conductivity of the mine backfill. Based on these results, mining is estimated to have little effect on the long-term post-reclamation concentrations in the groundwater in the PCS and the alluvium of Pinabete Arroyo and No Name Arroyo down gradient of the mine areas. Groundwater flow from the mine backfill will be insufficient to sustain intermittent or perennial baseflow in streams or flow at seeps and springs.

Surface Water Protection and Monitoring

The surface water monitoring plan, presented in Section 42 (Monitoring, Maintenance, Inspections, and Examinations), has been developed to monitor changes in the quantity and quality of the surface water resources during mining and reclamation activities. The fluvial geomorphic and traditional reclamation approaches utilized in the permit area will replicate the pre-mine landscape and reduce surface erosion and sediment yield to less than or equal to pre-mine conditions. The fluvial geomorphic and traditional reclamation approaches are discussed in Section 34 (Post-Mining Topography) and Section 38 (Post-Reclamation Surface Stabilization and Sediment Control). Post-reclamation sedimentology is discussed in Section 41 (Probable Hydrologic Consequences). NTEC will use a combination of the BTCA measures and BMPs, presented in Section 25 (Sediment Control and Section) and Section 38 (Post-Reclamation Surface Stabilization and Sediment Control), to control sediment and maintain water quality.

Surface materials unsuitable for plant growth will be placed in mined-out areas and handled in a manner that protects environmental resources and minimizes adverse surface water impacts. The measures and procedures to handle this material are discussed in Section 20 (Mining Operations) and Section 34 (Post-Reclamation Topography).

Acid and Toxic-Forming Materials

The handling of PATFM in a manner to prevent adverse impacts to surface water and groundwater is presented in Section 20 (Mining Operations) and Section 34 (Post-Reclamation Topography).

Transfer of Wells

Upon completion of mining, all wells will become the property of the Navajo Nation, as specified in NTEC's lease agreement. Any wells that the Navajo Nation does not want to maintain will be removed and the area reclaimed. Further discussion on the removal and the retention of wells in the post-reclamation

landscape is provided in Section 32 (Temporary Structures and Facilities Removal and Reclamation) and Section 33 (Post-Reclamation Roads, Building, Facilities, and Other Structures), respectively.

Water Rights and Replacement

The protection and replacement of water rights of present users is discussed in Section 35.5.

Discharges Into an Underground Mine

No underground mining is anticipated within the permit area, therefore, the potential for discharges to an underground mine does not exist.

Post-mining Land Use

Area disturbed by mining will be reclaimed to a grazing post-mining land use (PMLU) that is consistent with the pre-mining land use, described in Section 30 (Post-Reclamation Land Use) and Section 10 (Land Use), respectively. The reclamation of the area will be accomplished in a manner to minimize disturbance of the hydrologic balance within and adjacent to the permit area and prevent material damage to the hydrologic balance outside of the permit area. This will be accomplished by following methods and procedures described in the operation plan, sediment control plan, reclamation plan and monitoring plans found in Sections 20 through 23, Sections 25 through 26, Sections 30 through 39, and Section 42, respectively, of this PAP.

35.7.1 Mitigation Plan for No Name Arroyo Headcut Area

During surveys of baseline surface water resources, presented in Section 18, a headcut erosion feature was identified along the lower reach of No Name Arroyo at the western edge of the permit boundary. This headcut involves a near vertical drop of about 10 to 12 ft. The headcut is approximately 30 ft wide and the channel is incised about 8 to 12 ft downstream of the headcut. The channel widths in this segment vary from approximately 10 to 30 ft with near vertical channel banks. Channel bends are fairly minor and the channel bed is braided in places with channel vegetation consisting primarily of grasses with some salt cedar and low brush. No Name Arroyo consists of a wide shallow channel heavily braided in places and vegetated with grasses and weeds, brush, and some salt cedar upstream of the headcut.

Headcut migration occurs as a series of discrete mass failures of the surface layer caused by undercutting in a plunge pool formed immediately downstream. The timescale for each failure episode is controlled by the soil strength, soil unit weight, erodibility and critical shear stress, overall headcut height, backwater depth, and approach flow depth (Hanson et al. 2001). The rate of headcut advance was found to increase with both the upstream flow depth and with the backwater depth below the headcut height. Based on these results, it is expected that an increase in flows in the No Name channel as a result of the Pinabete Diversion could increase the rate of headcut migration and sediment yield in surface water flows. Consequently, a

mitigation plan for headcut stabilization was developed to prevent further migration and sediment contributions.

The structure is designed to pass the estimated peak flow from a 10yr-6hr event (combined No Name and Pinabete Diversion flows) into the incised channels below the headcut through two gabion drop structures. Berms located on either side of the two gabion drop structures serve to direct floodplain flows to the two structures. A gravel overflow on one of the berms allows flow from events larger than the 10yr-6hr storm to bypass the drop structures and continue as floodplain overflow. The headcut mitigation structure will benefit the water quality of No Name Arroyo by improving channel stability and reducing sediment contributions from erosion. The design for the headcut mitigation structure is shown on Exhibit 35.7.1.

35.8 Alluvial Valley Floor Reclamation Plan

OSM has determined that there is no alluvial valley floors present within or adjacent to the permit area. Therefore, this section is not applicable. The negative alluvial valley floor determination is provided in Section 19 (Alluvial Valley Floors).

35.9 Hydrologic Reclamation Plan Information Collection and Analysis

Fluvial geomorphic principles presented in the surface stabilization plan in Section 38 (Post-Reclamation Surface Stabilization and Sediment Control) and Natural Regrade with Geofluv™ software were used to develop the channel designs presented in the hydrologic reclamation plan. Model inputs for the reconstruction designs are included in Appendix 34.A.

SEDCAD modeling for the channel designs is contained in Appendix 41.C and 41.D with baseline modeling contained in Appendix 18.B. The subwatershed information was developed using Carlson Civil Suite, AutoCAD®, and ArcGIS® software. The base mapping used to develop subwatersheds is a combination of 10-ft-contoured aerial flight and digital elevation model (DEM) data of United States Geologic Survey (USGS) 7.5-minute topographic quadrangle maps (NMRGIS 2009; USGS 2009). All DEM analysis was performed utilizing the Spatial Analyst extension for ArcGIS® on DEM images projected to the North American Datum of 1927- State Plane New Mexico West coordinate system and in standard units (ft) of measure. Soils information for the SEDCAD modeling came from detailed baseline surveys, presented in Section 14 (Soil), of the permit area and Natural Resources Conservation Service surveys (Keetch 1980) of the adjacent areas outside of the permit area. Underlying assumptions that form the basis of all SEDCAD modeling are presented in Section 38 (Post-Reclamation Surface Stabilization and Sediment Control).

35.10 Certification of Designs and Exhibits

Certified exhibits for this section of the PAP are available for review upon request at the Navajo mine office.

References

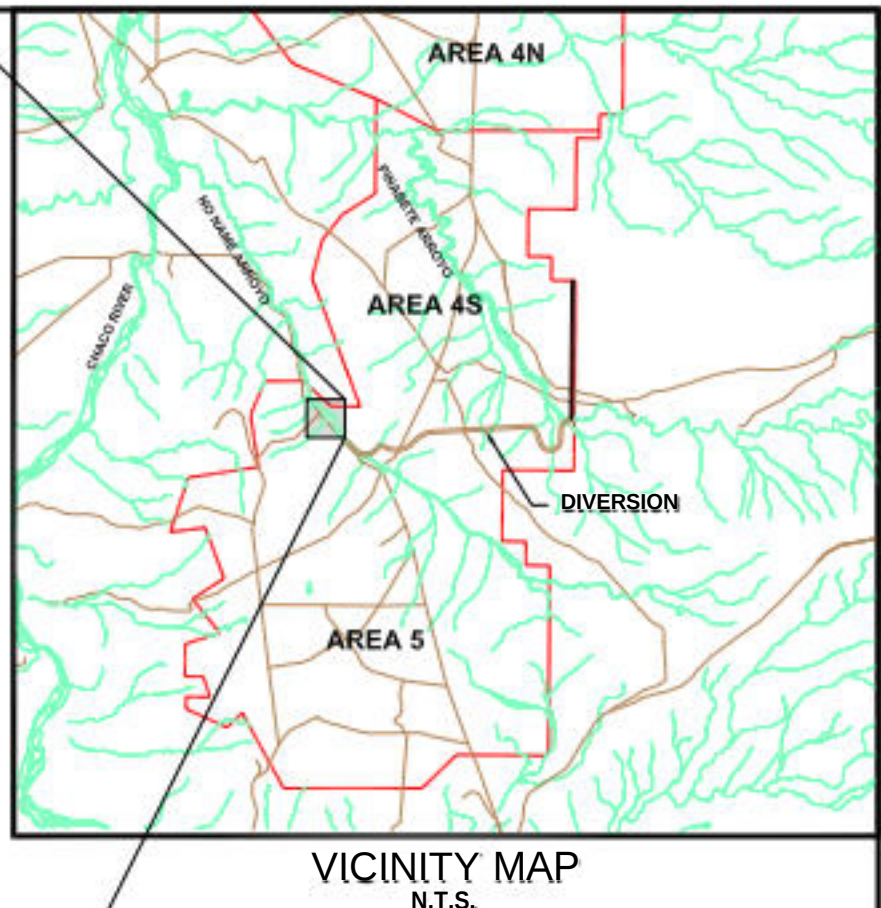
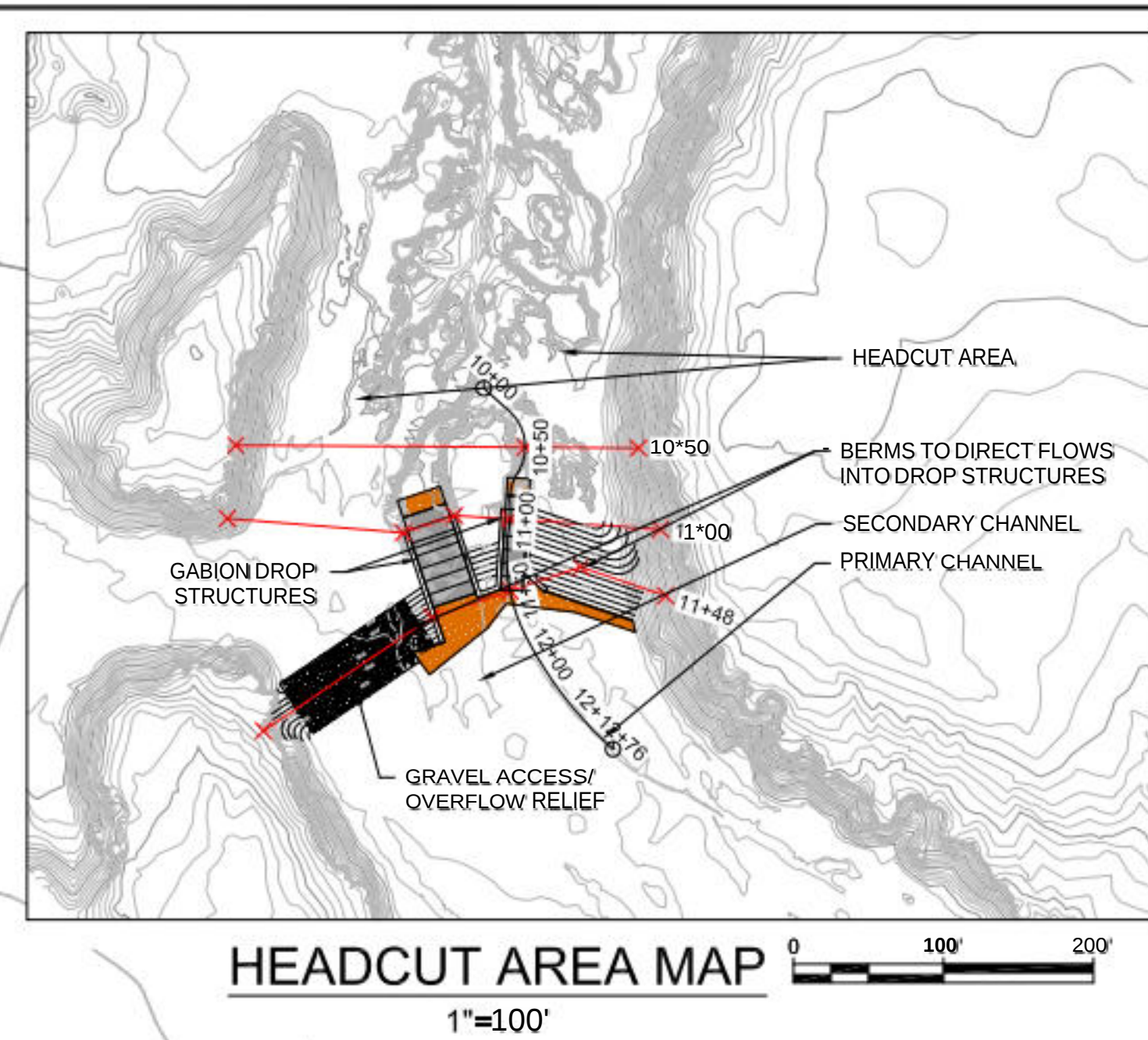
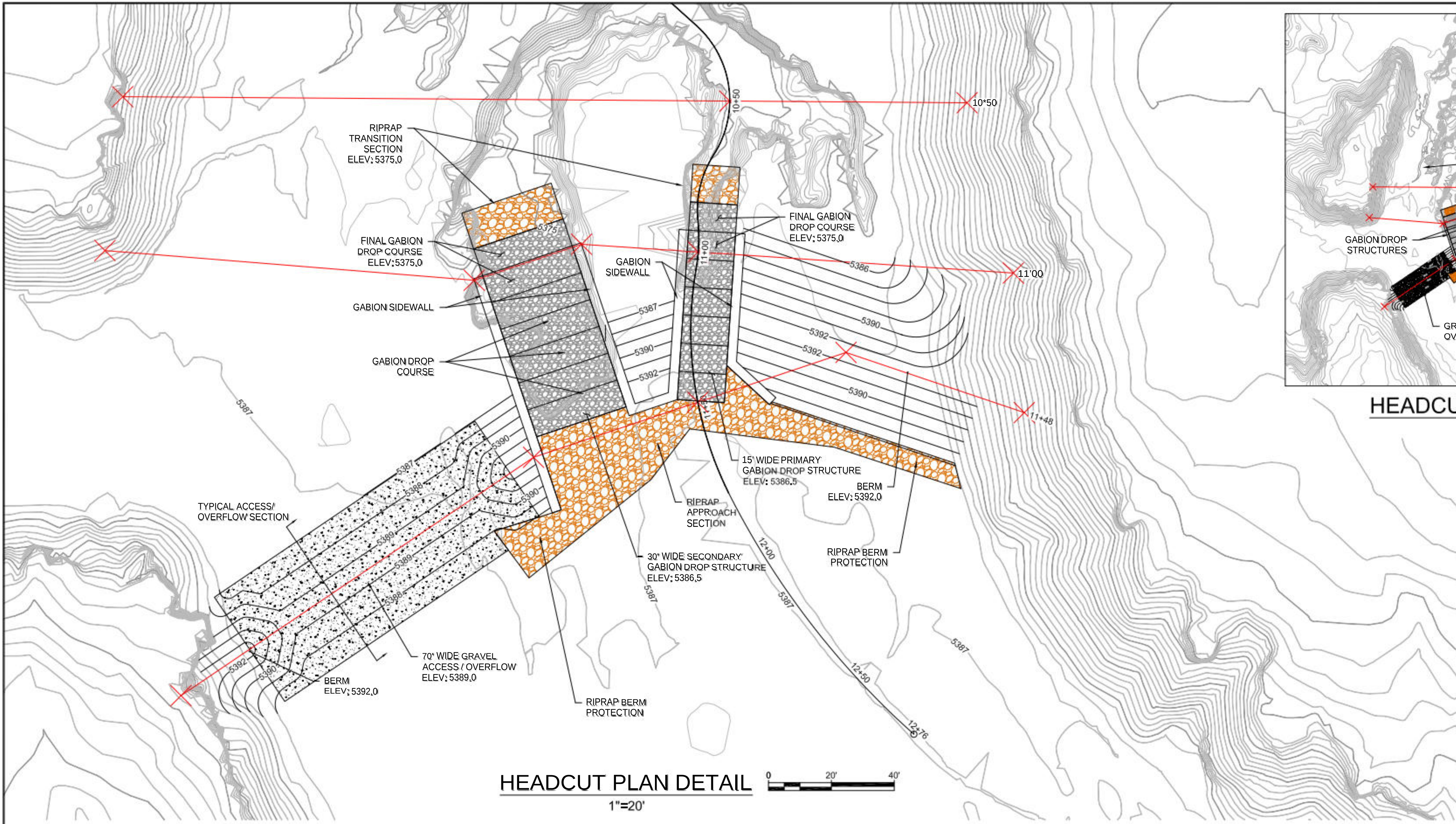
- Hanson, G. J., K. M. Robinson, and K. R. Cook. 2001. Prediction of Headcut Migration Using a Deterministic Approach. Transactions of the ASAE. Vol. 44(3):525–531.
- Keetch, C. Wesley. 1980. Soil Survey of San Juan County, New Mexico, Eastern Part. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.
- New Mexico Resource Geographic Information System. 2009. RGIS ftp site. http://rgis.unm.edu/loader_div.cfm?theme=Elevation (Verified 18 March 2009).
- United States Geological Survey. 2009. The National Map Seamless Server. <http://seamless.usgs.gov> (Verified 18 March 2009).

Table 35.2-1 HEC-RAS Results Summary No Name Arroyo Undisturbed and Reconstructed Channel Flow Velocities

Storm event	Undisturbed			Reconstructed		
	Q (cfs)	Maximum velocity (fps)	Average velocity (fps)	Q(cfs)	Maximum velocity (fps)	Average velocity (fps)
2-year	101	7.36	4.07	75	5.49	3.74
10-year	412	10.07	5.50	278	8.67	4.79
25-year	655	11.46	6.05	457	9.14	5.47
100-year	1,011	12.56	6.59	824	10.45	6.19

cfs = cubic feet per second

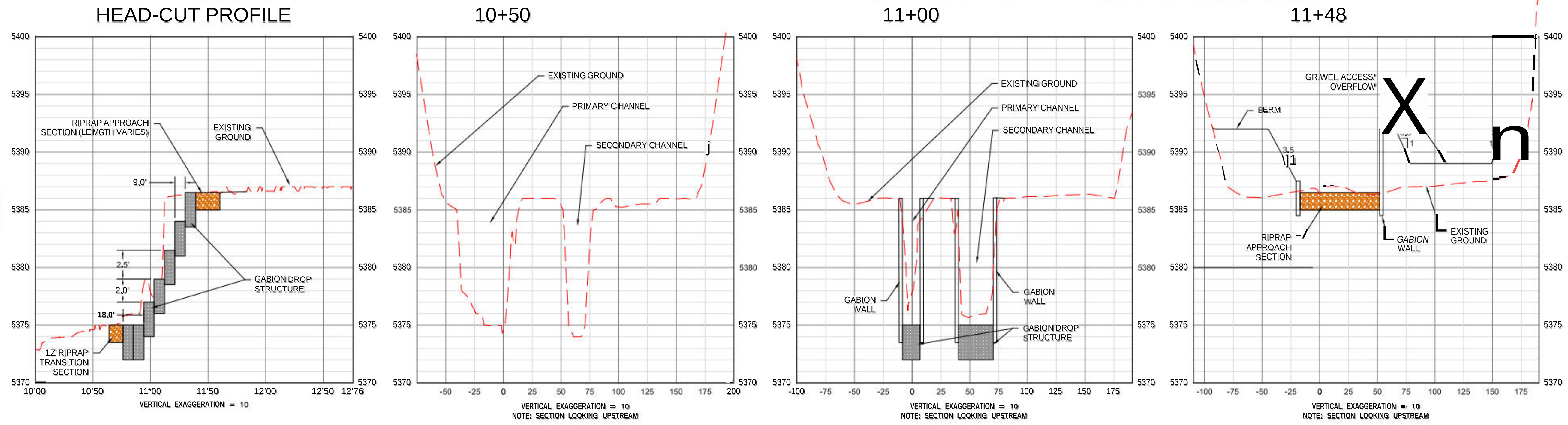
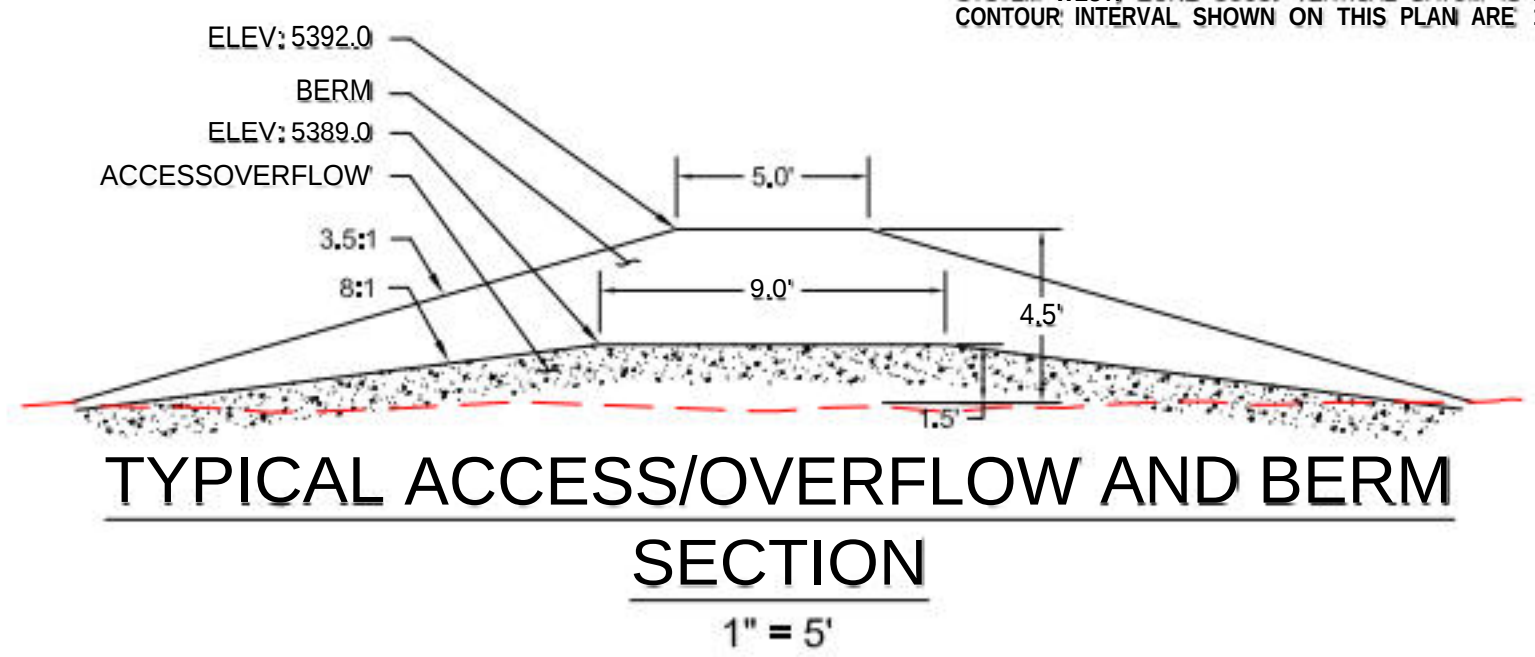
fps = feet per second



- NOTES
1. A GEOTEXTILE LAYER SHALL BE PLACED AT THE INTERFACE BETWEEN THE GABION BASKET AND THE SOIL.
 2. GABION SIZES ARE NOT INDICATED. DESIGN SHOWN IS BASED ON GABION BASKET STANDARD SIZING.
 3. THIS PLAN IS NOT FOR CONSTRUCTION. DETAILED DESIGN IS REQUIRED FOR CONSTRUCTION OF THE GABION DROP STRUCTURES.

SURVEY INFORMATION

THE MAIN MINE SURVEY WAS PERFORMED BY AERO-GRAPHICS IN MARCH 2008 AND WAS FLOWN BASED ON A 10-FOOT CONTOUR INTERVAL. THE NO NAME ARROYO SURVEY WAS PERFORMED BY AERO-GRAPHICS IN JULY 2008 AND WAS FLOWN BASED ON A 2-FOOT CONTOUR INTERVAL. SUPPLEMENTAL SURVEYS WERE PERFORMED BY BNCC FOR THE NO NAME IMPOUNDMENT IN JULY 2008, THE NO NAME ARROYO FROM JULY TO AUGUST 2008 AND THE EAST END OF THE PROPOSED DIVERSION IN MAY 2008. ALL BEARINGS AND DISTANCES ARE GRID BASED IN U.S. SURVEY FEET. HORIZONTAL DATUM IS NAD83 BASED ON NEW MEXICO COORDINATE SYSTEM WEST, ZONE 3003. VERTICAL DATUM IS NAVD83, GEOID 03. CONTOUR INTERVAL SHOWN ON THIS PLAN ARE 1 FOOT.



I PAUL J. KOS STAMPED AND SIGNED
THIS DRAWING ON 07/1/2009

ORIGINAL CERTIFIED SIGNED EXHIBITS
ARE MAINTAINED AT MINE SITE AND AT
THE OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT.

Engineer's Certification

NOT FOR CONSTRUCTION

D	DATE	U/M	DATE	MSK	AD	PK	7-1W
SUBMITTAL				APPROVED			
NO NAME PERMIT				NO NAME ARROYO			
HEADCUT MITIGATION				PLAN			
PREPARED BY MSK		DRAWN BY MSK		SCALE: AS SHOWN			
APPROVED BY PK		DATE Jul 01, 2009					

Appendix 35.A

No Name Arroyo

HEC-RAS Analysis - Undisturbed Channel

Profile Output Table - No Name Arroyo Undisturbed Channel 2yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92	101.0	5430.37	5432.98	5431.10	5432.99	0.000093	0.79	128.54	59.60	0.09			0.79	2.61
91.8925*	101.0	5430.22	5432.98	5431.23	5432.99	0.000157	0.99	102.01	49.55	0.12			0.99	2.75
91.785*	101.0	5430.07	5432.96	5431.30	5432.99	0.000274	1.27	79.28	39.60	0.16			1.27	2.89
91.6775*	101.0	5429.92	5432.94	5431.33	5432.98	0.000480	1.67	60.31	29.94	0.21			1.67	3.02
91.57	101.0	5429.77	5432.89	5431.45	5432.97	0.000857	2.27	44.50	20.78	0.27			2.27	3.12
91.465*	101.0	5429.59	5432.84	5431.67	5432.96	0.001426	2.78	36.30	18.22	0.35			2.78	3.25
91.36*	101.0	5429.42	5432.74	5431.84	5432.93	0.002482	3.47	29.11	15.78	0.45			3.47	3.32
91.255*	101.0	5429.25	5432.57	5431.97	5432.88	0.004641	4.45	22.69	13.35	0.60			4.45	3.32
91.15	101.0	5429.07	5432.03	5432.03	5432.76	0.014036	6.87	14.69	9.94	1.00			6.87	2.96
91.0533*	101.0	5428.81	5431.16	5431.60	5432.49	0.032540	9.25	10.92	9.23	1.50			9.25	2.35
90.9566*	101.0	5428.55	5430.74	5431.18	5432.14	0.036548	9.48	10.65	9.66	1.59			9.48	2.19
90.86	101.0	5428.29	5430.40	5430.84	5431.75	0.036444	9.33	10.83	10.16	1.59			9.33	2.11
90.6	101.0	5427.43	5429.44	5429.87	5430.74	0.036625	9.17	11.01	10.73	1.60			9.17	2.00
90.45*	101.0	5426.88	5428.70	5429.17	5430.12	0.044485	9.54	10.59	11.43	1.75			9.54	1.82
90.3	101.0	5426.33	5427.93	5428.36	5429.32	0.056065	9.48	10.65	14.11	1.92			9.48	1.60
90.2*	101.0	5426.29	5427.64	5428.00	5428.73	0.051401	8.40	12.03	18.24	1.82			8.40	1.35
90.1*	101.0	5426.25	5427.41	5427.67	5428.19	0.040645	7.09	14.25	23.59	1.61			7.09	1.16
90	101.0	5426.21	5427.20	5427.33	5427.69	0.034968	5.62	17.97	37.79	1.44			5.62	0.98
89.875*	101.0	5425.98	5427.06	5427.14	5427.46	0.021365	5.08	19.89	33.72	1.17			5.08	1.07
89.75*	101.0	5425.75	5426.94	5426.89	5427.25	0.012717	4.48	22.56	31.30	0.93			4.48	1.19
89.625*	101.0	5425.52	5426.75	5426.71	5427.07	0.012020	4.54	22.24	28.87	0.91			4.54	1.23
89.5	101.0	5425.29	5426.54	5426.54	5426.90	0.013376	4.86	20.79	26.35	0.96			4.86	1.24
89.4166*	101.0	5425.08	5426.24	5426.37	5426.77	0.023857	5.85	17.28	25.70	1.26			5.85	1.16
89.3333*	101.0	5424.87	5426.10	5426.21	5426.59	0.022367	5.62	17.96	27.03	1.22			5.62	1.23
89.25	101.0	5424.66	5426.29	5426.02	5426.46	0.005477	3.38	29.92	33.59	0.63			3.38	1.62
89.125*	101.0	5424.40	5426.28	5425.79	5426.39	0.002848	2.69	37.60	36.46	0.47			2.69	1.88
89	101.0	5424.13	5426.29	5425.51	5426.35	0.001434	2.05	49.16	42.62	0.34			2.05	2.16
88.8266*	101.0	5423.95	5426.23	5425.58	5426.32	0.002348	2.47	40.96	39.05	0.42			2.47	2.27
88.6533*	101.0	5423.77	5426.15	5425.53	5426.27	0.002737	2.72	37.13	34.16	0.46			2.72	2.38
88.48	101.0	5423.59	5426.08	5425.41	5426.21	0.002943	2.86	35.30	31.70	0.48			2.86	2.49
88.2400*	101.0	5423.60	5426.01	5425.40	5426.14	0.002980	2.88	35.04	31.45	0.48			2.88	2.41
88	101.0	5423.60	5425.97	5425.28	5426.07	0.002129	2.63	38.42	30.68	0.41			2.63	2.36
87.875*	101.0	5423.66	5425.91	5425.33	5426.04	0.002835	2.90	34.83	29.87	0.47			2.90	2.25
87.75*	101.0	5423.72	5425.85	5425.38	5426.00	0.003678	3.18	31.75	28.80	0.53			3.18	2.13
87.625*	101.0	5423.78	5425.75	5425.40	5425.95	0.005091	3.53	28.63	28.39	0.62			3.53	1.97
87.5	101.0	5423.84	5425.57	5425.45	5425.86	0.009300	4.31	23.42	27.06	0.82			4.31	1.73
87.3333*	101.0	5423.84	5425.46	5425.30	5425.71	0.008028	4.06	24.85	28.13	0.76			4.06	1.61
87.1666*	101.0	5423.84	5425.38	5425.13	5425.58	0.005697	3.61	27.98	29.21	0.65			3.61	1.54
87	101.0	5423.84	5425.33	5424.90	5425.49	0.003786	3.16	31.92	29.74	0.54			3.16	1.49
86.74	101.0	5423.82	5425.24	5424.79	5425.39	0.003727	3.12	32.38	30.41	0.53			3.12	1.42
86.62*	101.0	5423.73	5425.16	5424.80	5425.33	0.004703	3.34	30.25	30.58	0.59			3.34	1.43
86.5	101.0	5423.64	5424.96	5424.80	5425.25	0.009749	4.35	23.21	27.13	0.83			4.35	1.32
86.3849*	101.0	5423.55	5424.79	5424.79	5425.14	0.013813	4.74	21.32	28.66	0.97			4.74	1.24
86.27	101.0	5423.47	5424.84	5424.46	5424.94	0.003173	2.61	38.67	42.08	0.48			2.61	1.37
86.1349*	101.0	5423.31	5424.75	5424.47	5424.89	0.004499	2.97	34.02	39.81	0.57			2.97	1.44
86	101.0	5423.15	5424.58	5424.46	5424.80	0.009151	3.75	26.95	37.92	0.78			3.75	1.43
85.8*	101.0	5422.90	5424.45	5424.24	5424.63	0.006578	3.35	30.16	39.39	0.67			3.35	1.55
85.6	101.0	5422.64	5424.39	5424.01	5424.51	0.003827	2.84	35.61	39.72	0.53			2.84	1.75
85.35*	101.0	5422.58	5424.30	5423.91	5424.42	0.003370	2.73	37.00	39.74	0.50			2.73	1.72
85.1*	101.0	5422.52	5424.23	5423.81	5424.34	0.002953	2.62	38.52	39.76	0.47			2.62	1.71
84.85	101.0	5422.46	5424.17	5423.71	5424.27	0.002547	2.51	40.26	39.72	0.44			2.51	1.71
84.6833*	101.0	5422.36	5424.08	5423.72	5424.21	0.004349	2.88	35.04	42.06	0.56			2.88	1.72
84.5166*	101.0	5422.27	5423.92	5423.63	5424.12	0.006542	3.59	28.10	32.81	0.68			3.59	1.65
84.35	101.0	5422.17	5423.88	5423.44	5424.01	0.003538	2.93	34.46	34.22	0.51			2.93	1.71
84.2333*	101.0	5422.17	5423.85	5423.45	5423.97	0.003451	2.72	37.12	48.63	0.50			2.72	1.68
84.1166*	101.0	5422.17	5423.84	5423.39	5423.92	0.002818	2.27	44.43	55.16	0.45			2.27	1.67
84	101.0	5422.17	5423.83	5423.28	5423.88	0.001814	1.91	52.87	61.26	0.36			1.91	1.66
83.75	101.0	5422.39	5423.47	5423.47	5423.76	0.016148	4.31	23.44	42.15	1.01			4.31	1.08
83.625*	101.0	5422.08	5422.84	5423.07	5423.41	0.061106	6.08	16.60	47.39	1.81			6.08	0.76
83.5	101.0	5421.77	5423.20	5422.54	5423.21	0.000583	0.98	103.00	138.35	0.20			0.98	1.43
83.3849*	101.0	5421.42	5423.18	5422.39	5423.20	0.000693	1.29	78.11	78.94	0.23			1.29	1.76
83.27	101.0	5421.08	5423.10	5422.36	5423.19	0.001813	2.40	42.11	34.41	0.38			2.40	2.02
83	101.0	5420.96	5423.03	5422.45	5423.13	0.002273	2.51	40.24	36.37	0.42			2.51	2.07
82.8825*	101.0	5420.96	5423.03	5422.31	5423.09	0.001558	1.99	50.84	49.44	0.35			1.99	2.07
82.765*	101.0	5420.96	5423.03	5422.21	5423.07	0.001051	1.70	59.27	54.05	0.29			1.70	2.07
82.6475*	101.0	5420.97	5423.02	5422.15	5423.06	0.000783	1.49	67.61	60.25	0.25			1.49	2.05
82.53	101.0	5420.97	5423.02	5422.10	5423.05	0.000597	1.33	75.76	65.26	0.22			1.33	2.05
82.3999*	101.0	5420.95	5423.01	5422.08	5423.04	0.000573	1.37	73.86	59.38	0.22			1.37	2.06
82.27	101.0	5420.93	5422.98	5422.00	5423.03	0.000824	1.76	57.45	40.77	0.26			1.76	2.05
82.1349*	101.0	5421.01	5422.94	5422.23	5423.01	0.001534	2.18	46.25	38.14	0.35			2.18	1.93
82	101.0	5421.09	5422.84	5422.46	5422.98	0.003815	2.97	34.05	35.35	0.53			2.97	1.75

Profile Output Table - No Name Arroyo Undisturbed Channel 2yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	101.0	5421.00	5422.76	5422.43	5422.92	0.004489	3.17	31.82	33.76	0.58			3.17	1.76
81.75*	101.0	5420.92	5422.68	5422.38	5422.86	0.005255	3.41	29.65	31.85	0.62			3.41	1.76
81.625*	101.0	5420.83	5422.57	5422.33	5422.78	0.006525	3.71	27.20	30.21	0.69			3.71	1.74
81.5	101.0	5420.74	5422.36	5422.31	5422.68	0.011250	4.55	22.20	27.37	0.89			4.55	1.62
81.25	101.0	5420.44	5421.95	5421.95	5422.34	0.015384	5.05	19.99	26.61	1.03			5.05	1.51
81.125*	101.0	5420.06	5421.88	5421.51	5422.03	0.004340	3.10	32.59	35.02	0.57			3.10	1.82
81	101.0	5419.68	5421.92	5421.08	5421.98	0.001267	1.94	51.98	44.72	0.32			1.94	2.24
80.875*	101.0	5419.60	5421.87	5421.14	5421.96	0.002000	2.38	42.36	37.66	0.40			2.38	2.27
80.75	101.0	5419.53	5421.73	5421.28	5421.91	0.004335	3.39	29.81	27.78	0.58			3.39	2.20
80.5	101.0	5419.47	5421.59	5421.23	5421.80	0.005092	3.68	27.44	25.44	0.62			3.68	2.12
80.25*	101.0	5419.47	5421.46	5421.14	5421.67	0.005312	3.64	27.77	27.12	0.63			3.64	1.99
80	101.0	5419.47	5421.35	5421.03	5421.53	0.005067	3.44	29.37	30.15	0.61			3.44	1.88
79.775*	101.0	5419.29	5421.30	5420.75	5421.42	0.002831	2.75	36.71	34.02	0.47			2.75	2.01
79.55	101.0	5419.11	5421.29	5420.54	5421.36	0.001495	2.18	46.32	37.60	0.35			2.18	2.18
79.465*	101.0	5419.12	5421.26	5420.59	5421.35	0.001769	2.33	43.42	36.36	0.38			2.33	2.14
79.38*	101.0	5419.13	5421.23	5420.63	5421.33	0.002127	2.51	40.30	34.68	0.41			2.51	2.10
79.295*	101.0	5419.14	5421.20	5420.66	5421.31	0.002637	2.72	37.16	33.28	0.45			2.72	2.06
79.21*	101.0	5419.15	5421.15	5420.69	5421.29	0.003430	2.99	33.76	31.90	0.51			2.99	2.00
79.125*	101.0	5419.16	5421.07	5420.72	5421.25	0.005055	3.44	29.39	30.20	0.61			3.44	1.91
79.04	101.0	5419.17	5420.89	5420.76	5421.19	0.010103	4.46	22.63	26.39	0.85			4.46	1.71
78.77	101.0	5419.02	5420.55	5420.55	5420.90	0.013405	4.74	21.30	28.15	0.96			4.74	1.53
78.5	101.0	5418.74	5420.21	5420.05	5420.47	0.008905	4.14	24.42	29.17	0.80			4.14	1.47
78.375*	101.0	5418.54	5420.09	5419.92	5420.35	0.008506	4.08	24.73	29.07	0.78			4.08	1.55
78.25*	101.0	5418.35	5419.97	5419.81	5420.23	0.007942	4.07	24.83	27.86	0.76			4.07	1.62
78.125*	101.0	5418.15	5419.82	5419.67	5420.10	0.008709	4.30	23.48	25.90	0.80			4.30	1.67
78	101.0	5417.95	5419.57	5419.56	5419.98	0.013454	5.16	19.56	22.65	0.98			5.16	1.62
77.7966*	101.0	5417.52	5419.23	5419.23	5419.67	0.014797	5.34	18.90	22.35	1.02			5.34	1.71
77.5933*	101.0	5417.08	5418.75	5418.87	5419.33	0.020746	6.14	16.46	20.34	1.20			6.14	1.67
77.39	101.0	5416.65	5418.40	5418.49	5418.95	0.018437	5.97	16.93	19.93	1.14			5.97	1.75
77.2666*	101.0	5416.28	5417.95	5418.13	5418.67	0.025753	6.80	14.85	18.44	1.34			6.80	1.67
77.1433*	101.0	5415.91	5417.62	5417.78	5418.31	0.023924	6.69	15.11	18.20	1.29			6.69	1.71
77.02*	101.0	5415.54	5417.26	5417.43	5417.99	0.025042	6.87	14.70	17.55	1.32			6.87	1.71
76.8966*	101.0	5415.18	5417.39	5417.11	5417.67	0.006739	4.24	23.85	21.96	0.72			4.24	2.21
76.7733*	101.0	5414.81	5417.42	5416.79	5417.57	0.003035	3.18	31.76	24.66	0.49			3.18	2.60
76.65	101.0	5414.44	5417.43	5416.46	5417.53	0.001638	2.57	39.35	26.36	0.37			2.57	2.99
76.4666*	101.0	5414.50	5417.40	5416.41	5417.50	0.001506	2.46	41.14	27.81	0.36			2.46	2.90
76.2833*	101.0	5414.55	5417.38	5416.39	5417.47	0.001368	2.34	43.16	29.28	0.34			2.34	2.83
76.1	101.0	5414.61	5417.36	5416.40	5417.44	0.001263	2.24	45.03	30.74	0.33			2.24	2.75
75.984*	101.0	5414.62	5417.33	5416.46	5417.42	0.001617	2.46	41.00	29.26	0.37			2.46	2.71
75.868*	101.0	5414.64	5417.28	5416.52	5417.40	0.002219	2.76	36.53	27.79	0.42			2.76	2.64
75.752*	101.0	5414.65	5417.21	5416.59	5417.37	0.003144	3.19	31.69	25.20	0.50			3.19	2.56
75.6359*	101.0	5414.67	5417.12	5416.66	5417.33	0.004275	3.71	27.19	21.53	0.58			3.71	2.45
75.52	101.0	5414.68	5416.93	5416.72	5417.27	0.007847	4.68	21.60	19.04	0.77			4.68	2.25
75.3466*	101.0	5414.46	5416.78	5416.57	5417.12	0.007683	4.65	21.73	19.02	0.77			4.65	2.32
75.1733*	101.0	5414.24	5416.61	5416.36	5416.96	0.008395	4.75	21.28	19.24	0.80			4.75	2.36
75	101.0	5414.02	5416.39	5416.19	5416.80	0.008877	5.08	19.88	16.76	0.82			5.08	2.37
74.8*	101.0	5413.78	5416.23	5416.00	5416.57	0.009912	4.67	21.63	22.78	0.84			4.67	2.45
74.6*	101.0	5413.54	5416.04	5415.79	5416.34	0.010139	4.37	23.11	27.50	0.84			4.37	2.50
74.4	101.0	5413.30	5415.85	5415.61	5416.11	0.010219	4.09	24.68	32.73	0.83			4.09	2.55
74.2*	101.0	5413.27	5415.68	5415.23	5415.97	0.006320	4.33	23.33	19.43	0.70			4.33	2.41
74	101.0	5413.25	5415.62	5414.89	5415.85	0.003260	3.77	26.78	20.33	0.52			3.77	2.37
73.9166*	101.0	5413.20	5415.52	5415.01	5415.81	0.005371	4.32	23.39	17.11	0.65			4.32	2.32
73.8333*	101.0	5413.16	5415.43	5415.07	5415.77	0.007026	4.70	21.49	17.01	0.74			4.70	2.27
73.75	101.0	5413.11	5415.33	5415.05	5415.73	0.007694	5.01	20.15	15.45	0.77			5.01	2.22
73.5	101.0	5412.90	5415.21	5414.71	5415.54	0.005134	4.64	21.74	13.21	0.64			4.64	2.31
73.375*	101.0	5412.83	5415.11	5414.70	5415.48	0.006062	4.88	20.69	13.37	0.69			4.88	2.28
73.25	101.0	5412.76	5414.95	5414.70	5415.40	0.007932	5.37	18.81	12.95	0.78			5.37	2.19
73	101.0	5412.42	5414.85	5414.45	5415.20	0.005927	4.72	21.41	14.55	0.69			4.72	2.43
72.77	101.0	5412.16	5414.68	5414.23	5415.04	0.005688	4.82	20.97	13.12	0.67			4.82	2.52
72.615*	101.0	5412.04	5414.65	5414.06	5414.94	0.004455	4.29	23.56	17.60	0.60			4.29	2.61
72.46	101.0	5411.92	5414.65	5413.85	5414.84	0.003437	3.44	29.34	21.62	0.52			3.44	2.73
72.23	101.0	5411.71	5414.49	5413.92	5414.73	0.004466	3.97	25.41	18.46	0.60			3.97	2.78
72.1150*	101.0	5411.76	5414.42	5413.86	5414.69	0.004293	4.12	24.51	16.18	0.59			4.12	2.66
72	101.0	5411.82	5414.35	5413.74	5414.63	0.004456	4.26	23.72	15.11	0.60			4.26	2.53
71.78	101.0	5411.71	5413.91	5413.81	5414.46	0.010358	5.96	16.96	12.24	0.89			5.96	2.20
71.6866*	101.0	5411.68	5413.80	5413.74	5414.36	0.011615	5.98	16.89	13.46	0.94			5.98	2.12
71.5933*	101.0	5411.66	5413.69	5413.61	5414.22	0.011292	5.84	17.29	14.07	0.93			5.84	2.03
71.5	101.0	5411.63	5413.56	5413.49	5414.10	0.011551	5.94	17.01	13.50	0.93			5.94	1.92
71.375*	101.0	5411.50	5413.38	5413.34	5413.92	0.011506	5.91	17.10	13.83	0.94			5.91	1.88
71.25*	101.0	5411.37	5413.22	5413.15	5413.72	0.010981	5.68	17.79	14.92	0.92			5.68	1.85
71.125*	101.0	5411.23	5413.27	5412.97	5413.55	0.005918	4.25	23.79	19.58	0.68			4.25	2.04

Profile Output Table - No Name Arroyo Undisturbed Channel 2yr-6hr
HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71	101.0	5411.10	5413.34	5412.56	5413.47	0.002005	2.90	34.85	21.89	0.40			2.90	2.24
70.875*	101.0	5411.04	5412.86	5412.82	5413.38	0.011655	5.76	17.55	15.14	0.94			5.76	1.82
70.75	101.0	5410.97	5412.85	5412.57	5413.20	0.006742	4.71	21.43	16.54	0.73			4.71	1.88
70.65*	101.0	5410.80	5412.77	5412.50	5413.11	0.006965	4.70	21.50	17.17	0.74			4.70	1.97
70.55*	101.0	5410.62	5412.67	5412.41	5413.02	0.007294	4.72	21.40	17.62	0.75			4.72	2.05
70.45*	101.0	5410.45	5412.58	5412.35	5412.93	0.007473	4.74	21.29	26.40	0.76			4.74	2.13
70.35	101.0	5410.28	5412.73	5412.25	5412.81	0.002105	2.34	43.18	39.64	0.39			2.34	2.44
70.175*	101.0	5410.25	5412.58	5412.15	5412.75	0.004473	3.32	30.44	29.89	0.58			3.32	2.33
70	101.0	5410.21	5412.08	5412.08	5412.58	0.014488	5.69	17.74	28.29	1.02			5.69	1.87
69.75*	101.0	5409.81	5411.15	5411.41	5411.99	0.032304	7.36	13.72	18.00	1.49			7.36	1.34
69.5	101.0	5409.42	5411.66	5410.93	5411.79	0.002247	2.98	33.89	23.07	0.43			2.98	2.24
69.3333*	101.0	5409.23	5411.57	5410.83	5411.74	0.002751	3.34	30.20	19.92	0.48			3.34	2.34
69.1666*	101.0	5409.05	5411.47	5410.72	5411.68	0.003237	3.75	26.96	16.58	0.52			3.75	2.42
69	101.0	5408.86	5411.32	5410.71	5411.60	0.004121	4.27	23.66	14.31	0.58			4.27	2.46
68.75*	101.0	5408.79	5411.22	5410.69	5411.49	0.004526	4.16	24.26	16.38	0.60			4.16	2.43
68.5	101.0	5408.71	5411.04	5410.61	5411.37	0.005793	4.59	22.00	15.42	0.68			4.59	2.33
68.375*	101.0	5408.70	5411.00	5410.58	5411.28	0.005332	4.20	24.03	18.46	0.65			4.20	2.30
68.25	101.0	5408.69	5410.98	5410.33	5411.20	0.003729	3.70	27.31	19.40	0.55			3.70	2.29
68.13	101.0	5408.63	5410.95	5410.51	5411.14	0.004512	3.50	28.84	34.15	0.59			3.50	2.32
67.99	101.0	5408.63	5410.95	5410.15	5411.06	0.002348	2.75	36.67	29.27	0.43			2.75	2.32
67.89*	101.0	5408.63	5410.88	5410.24	5411.04	0.003248	3.19	31.65	25.80	0.51			3.19	2.25
67.79	101.0	5408.63	5410.73	5410.27	5410.99	0.005243	4.09	24.68	19.36	0.64			4.09	2.10
67.65	101.0	5408.40	5410.61	5410.23	5410.90	0.005865	4.34	23.26	18.18	0.68			4.34	2.21
67.4	101.0	5408.12	5410.49	5410.07	5410.75	0.005142	4.12	24.50	18.80	0.64			4.12	2.37
67.2*	101.0	5407.92	5410.39	5409.97	5410.64	0.005063	4.02	25.12	19.98	0.63			4.02	2.47
67	101.0	5407.73	5410.31	5409.80	5410.53	0.004032	3.77	26.81	19.73	0.57			3.77	2.58
66.75*	101.0	5407.68	5410.21	5409.71	5410.43	0.004334	3.74	26.99	21.36	0.59			3.74	2.53
66.5	101.0	5407.63	5410.13	5409.50	5410.32	0.003524	3.51	28.79	21.41	0.53			3.51	2.50
66.255*	101.0	5407.58	5410.00	5409.49	5410.22	0.004187	3.76	26.89	20.57	0.58			3.76	2.42
66.01	101.0	5407.52	5409.65	5409.52	5410.06	0.010183	5.11	19.77	18.02	0.86			5.11	2.13
65.84*	101.0	5407.39	5409.51	5409.35	5409.90	0.008595	4.97	20.30	17.32	0.81			4.97	2.12
65.67*	101.0	5407.25	5409.41	5409.14	5409.73	0.006778	4.56	22.16	18.18	0.73			4.56	2.16
65.5	101.0	5407.12	5409.35	5408.97	5409.61	0.005176	4.02	25.10	20.36	0.64			4.02	2.23
65.25*	101.0	5406.85	5409.23	5408.85	5409.47	0.005283	3.94	25.66	21.79	0.64			3.94	2.38
65	101.0	5406.58	5408.96	5408.75	5409.30	0.008091	4.70	21.48	18.91	0.78			4.70	2.38
64.8*	101.0	5406.58	5408.92	5408.50	5409.14	0.004494	3.79	26.63	21.14	0.60			3.79	2.33
64.6*	101.0	5406.58	5408.88	5408.25	5409.05	0.002941	3.29	30.70	21.99	0.49			3.29	2.30
64.4	101.0	5406.58	5408.85	5408.04	5408.99	0.002180	3.00	33.64	21.89	0.43			3.00	2.27
64.175*	101.0	5406.38	5408.81	5408.16	5408.93	0.002508	2.81	35.95	28.91	0.44			2.81	2.43
63.95	101.0	5406.17	5408.39	5408.21	5408.80	0.008739	5.14	19.64	27.90	0.82			5.14	2.22
63.7633*	101.0	5405.99	5408.33	5408.05	5408.58	0.008267	4.01	25.21	28.97	0.76			4.01	2.34
63.5766*	101.0	5405.81	5408.16	5407.95	5408.43	0.007512	4.13	24.47	25.26	0.74			4.13	2.35
63.39	101.0	5405.63	5408.01	5407.74	5408.28	0.006932	4.17	24.23	23.32	0.72			4.17	2.38
63.2066*	101.0	5405.46	5407.87	5407.61	5408.13	0.007718	4.10	24.61	26.34	0.75			4.10	2.41
63.0233*	101.0	5405.30	5407.86	5407.43	5408.00	0.003685	3.03	33.37	32.41	0.53			3.03	2.56
62.84	101.0	5405.13	5407.87	5406.99	5407.94	0.001306	2.13	47.51	35.78	0.33			2.13	2.74
62.6	101.0	5405.13	5407.86	5406.97	5407.91	0.000881	1.77	57.04	42.39	0.27			1.77	2.73
62.475*	101.0	5405.13	5407.79	5407.16	5407.89	0.002162	2.55	39.62	33.45	0.41			2.55	2.66
62.35	101.0	5405.13	5407.72	5407.06	5407.86	0.002470	2.97	34.06	24.74	0.45			2.97	2.59
62.175*	101.0	5405.10	5407.62	5407.07	5407.81	0.003762	3.49	28.95	22.84	0.55			3.49	2.52
62	101.0	5405.08	5407.53	5406.98	5407.74	0.003869	3.63	27.82	20.93	0.55			3.63	2.45
61.75*	101.0	5405.03	5407.25	5407.08	5407.60	0.008487	4.70	21.48	19.98	0.80			4.70	2.22
61.5	101.0	5404.98	5407.15	5406.76	5407.39	0.005082	3.96	25.52	20.83	0.63			3.96	2.17
61.25*	101.0	5404.82	5406.96	5406.73	5407.25	0.007170	4.33	23.34	21.78	0.74			4.33	2.14
61	101.0	5404.66	5406.84	5406.48	5407.06	0.005437	3.78	26.70	24.85	0.64			3.78	2.18
60.75*	101.0	5404.53	5406.76	5406.36	5406.92	0.004150	3.25	31.10	29.89	0.56			3.25	2.23
60.5	101.0	5404.39	5406.69	5406.19	5406.82	0.002873	2.87	35.14	30.70	0.47			2.87	2.30
60.25*	101.0	5404.26	5406.57	5406.09	5406.74	0.003615	3.30	30.65	25.84	0.53			3.30	2.31
60	101.0	5404.13	5406.45	5405.94	5406.64	0.003682	3.54	28.52	21.71	0.54			3.54	2.31
59.75*	101.0	5404.00	5406.36	5405.77	5406.54	0.003461	3.39	29.81	23.20	0.53			3.39	2.36
59.5	101.0	5403.88	5406.26	5405.73	5406.45	0.003638	3.47	29.09	22.42	0.54			3.47	2.38
59.25*	101.0	5403.84	5406.10	5405.70	5406.34	0.005246	3.92	25.78	22.03	0.64			3.92	2.26
59	101.0	5403.80	5405.92	5405.59	5406.20	0.006118	4.25	23.78	19.99	0.69			4.25	2.12
58.82*	101.0	5403.67	5405.82	5405.45	5406.08	0.005993	4.05	24.92	22.33	0.68			4.05	2.15
58.64*	101.0	5403.54	5405.74	5405.34	5405.96	0.004904	3.75	26.91	23.39	0.62			3.75	2.20
58.46	101.0	5403.41	5405.69	5405.17	5405.87	0.003633	3.41	29.66	29.46	0.54			3.41	2.28
58.23*	101.0	5403.30	5405.60	5405.03	5405.78	0.003439	3.41	29.63	25.20	0.53			3.41	2.30
58	101.0	5403.19	5405.53	5404.88	5405.70	0.003093	3.35	30.13	27.37	0.50			3.35	2.34
57.8825*	101.0	5403.17	5405.49	5404.91	5405.66	0.003244	3.34	30.19	25.98	0.51			3.34	2.32
57.765*	101.0	5403.16	5405.45	5404.89	5405.62	0.003342	3.33	30.36	23.74	0.52			3.33	2.29
57.6475*	101.0	5403.14	5405.41	5404.85	5405.58	0.003493	3.33	30.35	36.25	0.53			3.33	2.27

Profile Output Table - No Name Arroyo Undisturbed Channel 2yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.53	101.0	5403.12	5405.36	5404.79	5405.54	0.003732	3.37	29.99	45.22	0.54			3.37	2.24
57.38	101.0	5403.07	5405.31	5404.79	5405.49	0.003380	3.40	30.38	37.99	0.52		0.65	3.32	2.24
57.23	101.0	5403.06	5405.33	5404.53	5405.42	0.001660	2.42	41.73	31.36	0.37			2.42	2.27
57	101.0	5403.03	5405.22	5404.56	5405.37	0.002548	3.12	32.34	22.55	0.46			3.12	2.19
56.75*	101.0	5402.90	5405.12	5404.49	5405.29	0.003067	3.36	30.06	21.58	0.50			3.36	2.22
56.5	101.0	5402.77	5405.03	5404.44	5405.21	0.003220	3.40	29.72	21.73	0.51			3.40	2.26
56.375*	101.0	5402.67	5404.97	5404.40	5405.16	0.003448	3.47	29.10	21.70	0.53			3.47	2.30
56.25*	101.0	5402.58	5404.91	5404.38	5405.10	0.003715	3.54	28.52	21.82	0.55			3.54	2.33
56.125*	101.0	5402.48	5404.84	5404.33	5405.05	0.003994	3.61	27.97	21.93	0.56			3.61	2.36
56	101.0	5402.38	5404.78	5404.29	5404.98	0.004121	3.67	27.51	21.47	0.57			3.67	2.40
55.875*	101.0	5402.38	5404.73	5404.24	5404.93	0.004033	3.66	27.60	21.31	0.57			3.66	2.35
55.75*	101.0	5402.38	5404.68	5404.16	5404.88	0.003851	3.63	27.83	20.97	0.56			3.63	2.30
55.625*	101.0	5402.38	5404.63	5404.10	5404.84	0.003660	3.61	27.97	20.36	0.54			3.61	2.25
55.5	101.0	5402.38	5404.59	5404.03	5404.79	0.003460	3.58	28.22	19.84	0.53			3.58	2.21
55.375*	101.0	5402.38	5404.57	5404.00	5404.74	0.003081	3.30	30.63	22.55	0.50			3.30	2.19
55.25*	101.0	5402.38	5404.55	5403.97	5404.69	0.002836	3.08	32.76	25.24	0.48			3.08	2.17
55.125*	101.0	5402.38	5404.52	5403.98	5404.65	0.002723	2.93	34.49	27.97	0.46			2.93	2.14
55	101.0	5402.38	5404.49	5403.97	5404.62	0.002662	2.81	35.98	30.66	0.46			2.81	2.11
54.875*	101.0	5402.38	5404.45	5403.96	5404.58	0.002930	2.92	34.64	30.02	0.48			2.92	2.07
54.75*	101.0	5402.38	5404.40	5403.94	5404.54	0.003234	3.03	33.34	29.41	0.50			3.03	2.02
54.625*	101.0	5402.37	5404.34	5403.91	5404.50	0.003633	3.17	31.90	28.75	0.53			3.17	1.97
54.5	101.0	5402.37	5404.28	5403.88	5404.45	0.004164	3.33	30.32	28.05	0.56			3.33	1.91
54.25*	101.0	5402.29	5404.19	5403.75	5404.35	0.003782	3.28	30.80	27.13	0.54			3.28	1.90
54	101.0	5402.20	5404.07	5403.57	5404.25	0.004337	3.42	29.56	33.01	0.57			3.42	1.87
53.8233*	101.0	5402.10	5404.00	5403.53	5404.17	0.004068	3.29	30.70	70.08	0.56			3.29	1.90
53.6466*	101.0	5402.01	5403.94	5403.48	5404.09	0.003981	3.18	31.74	81.09	0.55			3.18	1.93
53.47	101.0	5401.91	5403.87	5403.45	5404.02	0.003904	3.07	33.19	119.42	0.54		0.45	3.04	1.96
Max							7.36						Avg	4.07
Min							1.94							
Avg							4.07							

The undisturbed channel reaches following outside of the reconstructed channel reaches were not included in determining the maximum, minimum, and average velocities. The reconstructed reaches are from Station 81.50 to 72.23 and from Station 71.00 to 67.00.

Profile Output Table - No Name Arroyo Undisturbed Channel 10yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92	412.0	5430.37	5435.79	5431.87	5435.81	0.000108	1.29	318.36	77.61	0.11			1.29	5.42
91.8925*	412.0	5430.22	5435.77	5432.13	5435.81	0.000168	1.58	260.77	65.24	0.14			1.58	5.55
91.785*	412.0	5430.07	5435.74	5432.40	5435.81	0.000279	1.98	207.96	53.45	0.18			1.98	5.67
91.6775*	412.0	5429.92	5435.69	5432.70	5435.80	0.000506	2.58	159.54	42.25	0.23			2.58	5.77
91.57	412.0	5429.77	5435.58	5433.07	5435.78	0.001087	3.60	114.44	31.51	0.33			3.60	5.81
91.465*	412.0	5429.59	5435.48	5433.41	5435.76	0.001623	4.22	97.65	28.57	0.40			4.22	5.89
91.36*	412.0	5429.42	5435.33	5433.75	5435.72	0.002558	5.01	82.31	26.19	0.50			5.01	5.91
91.255*	412.0	5429.25	5435.10	5434.02	5435.68	0.004130	6.07	67.82	23.05	0.62	0.10		6.07	5.85
91.15	412.0	5429.07	5434.27	5434.27	5435.54	0.011466	9.05	45.52	17.53	0.99			9.05	5.20
91.0533*	412.0	5428.81	5432.88	5433.67	5435.28	0.029861	12.44	33.13	17.04	1.57			12.44	4.06
90.9566*	412.0	5428.55	5432.33	5433.18	5434.92	0.037019	12.91	31.92	18.60	1.74			12.91	3.78
90.86	412.0	5428.29	5431.92	5432.82	5434.55	0.034514	13.00	31.68	17.33	1.69			13.00	3.63
90.6	412.0	5427.43	5430.88	5431.76	5433.62	0.036034	13.28	31.02	16.99	1.73			13.28	3.45
90.45*	412.0	5426.88	5429.96	5430.92	5432.97	0.046591	13.93	29.58	18.73	1.95			13.93	3.08
90.3	412.0	5426.33	5428.97	5429.97	5432.19	0.053763	14.39	28.63	19.38	2.09			14.39	2.64
90.2*	412.0	5426.29	5428.40	5429.33	5431.57	0.069995	14.29	28.83	24.72	2.33			14.29	2.11
90.1*	412.0	5426.25	5428.00	5428.76	5430.68	0.076535	13.15	31.32	32.93	2.38			13.15	1.75
90	412.0	5426.21	5427.63	5428.27	5429.79	0.069611	11.79	34.93	40.39	2.23			11.79	1.42
89.875*	412.0	5425.98	5427.73	5428.11	5429.03	0.029351	9.15	45.00	39.83	1.52			9.15	1.75
89.75*	412.0	5425.75	5428.18	5427.94	5428.74	0.007704	6.02	68.40	41.42	0.83			6.02	2.43
89.625*	412.0	5425.52	5427.98	5427.85	5428.61	0.008601	6.37	64.69	39.05	0.87			6.37	2.46
89.5	412.0	5425.29	5427.71	5427.66	5428.49	0.011324	7.09	58.14	36.57	0.99			7.09	2.41
89.4166*	412.0	5425.08	5427.68	5427.52	5428.33	0.008673	6.48	63.59	37.47	0.88			6.48	2.59
89.3333*	412.0	5424.87	5427.73	5427.35	5428.21	0.005676	5.57	73.90	39.64	0.72			5.57	2.86
89.25	412.0	5424.66	5427.77	5427.09	5428.14	0.003690	4.91	83.94	39.19	0.59			4.91	3.11
89.125*	412.0	5424.40	5427.85	5426.89	5428.06	0.002127	3.69	111.50	53.42	0.45			3.69	3.45
89	412.0	5424.13	5427.85	5426.55	5428.02	0.001540	3.29	125.38	64.24	0.39			3.29	3.72
88.8266*	412.0	5423.95	5427.83	5426.73	5427.99	0.001951	3.17	129.80	73.64	0.42			3.17	3.88
88.6533*	412.0	5423.77	5427.77	5426.78	5427.95	0.002570	3.34	123.36	79.86	0.47			3.34	4.00
88.48	412.0	5423.59	5427.69	5426.80	5427.89	0.002680	3.62	113.68	66.98	0.49			3.62	4.10
88.2400*	412.0	5423.60	5427.64	5426.78	5427.83	0.002155	3.46	118.93	63.67	0.45			3.46	4.04
88	412.0	5423.60	5427.42	5426.50	5427.75	0.002888	4.64	88.87	37.41	0.53			4.64	3.82
87.875*	412.0	5423.66	5427.34	5426.58	5427.72	0.003473	4.94	83.35	36.75	0.58			4.94	3.68
87.75*	412.0	5423.72	5427.24	5426.64	5427.68	0.004218	5.29	77.87	35.98	0.63			5.29	3.52
87.625*	412.0	5423.78	5427.12	5426.64	5427.63	0.005186	5.69	72.39	35.04	0.70			5.69	3.34
87.5	412.0	5423.84	5426.82	5426.65	5427.52	0.008381	6.72	61.28	33.13	0.87			6.72	2.97
87.3333*	412.0	5423.84	5426.75	5426.44	5427.35	0.006903	6.24	66.04	34.61	0.80			6.24	2.90
87.1666*	412.0	5423.84	5426.69	5426.25	5427.21	0.005616	5.79	71.14	35.64	0.72			5.79	2.85
87	412.0	5423.84	5426.64	5426.07	5427.10	0.004669	5.42	75.99	36.41	0.66			5.42	2.80
86.74	412.0	5423.82	5426.57	5426.02	5426.96	0.004296	4.99	82.49	42.16	0.63			4.99	2.75
86.62*	412.0	5423.73	5426.58	5426.07	5426.86	0.004192	4.31	95.54	60.23	0.60			4.31	2.85
86.5	412.0	5423.64	5426.23	5426.23	5426.75	0.013338	5.82	70.73	67.72	1.00			5.82	2.59
86.3849*	412.0	5423.55	5425.46	5425.77	5426.51	0.033546	8.20	50.26	57.81	1.55			8.20	1.91
86.27	412.0	5423.47	5426.02	5425.38	5426.35	0.003511	4.56	90.37	47.09	0.57			4.56	2.55
86.1349*	412.0	5423.31	5425.88	5425.41	5426.28	0.004744	5.08	81.06	43.34	0.65			5.08	2.57
86	412.0	5423.15	5425.64	5425.40	5426.20	0.007582	5.98	68.85	40.97	0.81			5.98	2.49
85.8*	412.0	5422.90	5425.59	5425.20	5426.03	0.005480	5.35	77.02	42.74	0.70			5.35	2.69
85.6	412.0	5422.64	5425.56	5424.98	5425.91	0.004061	4.80	85.83	44.74	0.61			4.80	2.92
85.35*	412.0	5422.58	5425.45	5424.86	5425.81	0.004102	4.84	85.04	44.16	0.62			4.84	2.87
85.1*	412.0	5422.52	5425.34	5424.74	5425.71	0.004061	4.87	84.59	43.14	0.61			4.87	2.82
84.85	412.0	5422.46	5425.24	5424.68	5425.61	0.004050	4.88	84.35	42.70	0.61			4.88	2.78
84.6833*	412.0	5422.36	5425.17	5424.70	5425.53	0.004504	4.79	86.09	49.13	0.64			4.79	2.81
84.5166*	412.0	5422.27	5424.95	5424.79	5425.42	0.008486	5.51	74.71	55.80	0.84			5.51	2.68
84.35	412.0	5422.17	5424.71	5424.61	5425.29	0.009953	6.11	67.40	48.03	0.91			6.11	2.54
84.2333*	412.0	5422.17	5424.85	5424.40	5425.12	0.004568	4.12	99.92	72.49	0.62			4.12	2.68
84.1166*	412.0	5422.17	5424.83	5424.26	5425.05	0.003494	3.80	108.53	86.13	0.55			3.80	2.66
84	412.0	5422.17	5424.84	5424.11	5425.00	0.002296	3.22	128.13	80.89	0.45			3.22	2.66
83.75	412.0	5422.39	5424.71	5424.28	5424.92	0.004033	3.68	111.83	160.91	0.58			3.68	2.32
83.625*	412.0	5422.08	5424.79	5423.63	5424.86	0.000747	1.99	206.61	115.26	0.26			1.99	2.71
83.5	412.0	5421.77	5424.82	5423.07	5424.84	0.000208	1.19	344.85	158.58	0.14			1.19	3.05
83.3849*	412.0	5421.42	5424.78	5423.13	5424.83	0.000459	1.84	223.53	96.98	0.21			1.84	3.36
83.27	412.0	5421.08	5424.53	5423.58	5424.80	0.002369	4.20	98.19	41.75	0.48			4.20	3.45
83	412.0	5420.96	5424.46	5423.53	5424.73	0.002441	4.14	99.43	43.93	0.49			4.14	3.50
82.8825*	412.0	5420.96	5424.52	5423.30	5424.67	0.001360	3.16	130.52	56.60	0.37			3.16	3.56
82.765*	412.0	5420.96	5424.54	5423.15	5424.64	0.000959	2.63	156.39	68.75	0.31			2.63	3.57
82.6475*	412.0	5420.97	5424.54	5423.05	5424.62	0.000774	2.32	177.51	80.47	0.28			2.32	3.57
82.53	412.0	5420.97	5424.54	5422.94	5424.61	0.000681	2.12	194.33	91.73	0.26			2.12	3.57
82.3999*	412.0	5420.95	5424.51	5422.92	5424.60	0.000732	2.44	169.05	67.98	0.27			2.44	3.56
82.27	412.0	5420.93	5424.38	5423.05	5424.58	0.001471	3.52	117.01	44.40	0.38			3.52	3.45
82.1349*	412.0	5421.01	5424.28	5423.26	5424.55	0.002270	4.13	99.79	41.60	0.47			4.13	3.27
82	412.0	5421.09	5424.08	5423.51	5424.49	0.004296	5.17	79.73	38.52	0.63			5.17	2.99

Profile Output Table - No Name Arroyo Undisturbed Channel 10yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	412.0	5421.00	5423.99	5423.48	5424.43	0.004767	5.30	77.74	39.34	0.66			5.30	2.99
81.75*	412.0	5420.92	5423.91	5423.48	5424.37	0.005383	5.45	75.58	40.39	0.70			5.45	2.99
81.625*	412.0	5420.83	5423.80	5423.49	5424.29	0.006143	5.62	73.33	41.47	0.74			5.62	2.97
81.5	412.0	5420.74	5423.46	5423.46	5424.16	0.011147	6.74	61.12	41.18	0.97			6.74	2.72
81.25	412.0	5420.44	5423.40	5423.07	5423.85	0.006287	5.43	75.89	115.60	0.75			5.43	2.96
81.125*	412.0	5420.06	5423.54	5422.64	5423.72	0.002100	3.45	119.39	63.19	0.44			3.45	3.48
81	412.0	5419.68	5423.58	5422.19	5423.68	0.001051	2.56	160.87	79.36	0.32			2.56	3.90
80.875*	412.0	5419.60	5423.49	5422.33	5423.66	0.001638	3.29	125.26	58.99	0.40			3.29	3.89
80.75	412.0	5419.53	5423.20	5422.59	5423.60	0.004187	5.06	81.41	40.20	0.63			5.06	3.67
80.5	412.0	5419.47	5422.98	5422.55	5423.49	0.005637	5.72	72.09	37.00	0.72			5.72	3.51
80.25*	412.0	5419.47	5422.87	5422.36	5423.34	0.005004	5.52	74.61	36.80	0.68			5.52	3.40
80	412.0	5419.47	5422.78	5422.17	5423.21	0.004241	5.25	78.47	36.72	0.63			5.25	3.31
79.775*	412.0	5419.29	5422.79	5421.91	5423.10	0.002799	4.49	91.81	39.82	0.52			4.49	3.50
79.55	412.0	5419.11	5422.80	5421.61	5423.02	0.001865	3.84	107.23	43.72	0.43			3.84	3.69
79.465*	412.0	5419.12	5422.75	5421.70	5423.01	0.002133	4.05	101.80	42.10	0.46			4.05	3.63
79.38*	412.0	5419.13	5422.70	5421.74	5422.99	0.002493	4.29	96.01	40.95	0.49			4.29	3.57
79.295*	412.0	5419.14	5422.64	5421.79	5422.96	0.002963	4.57	90.11	39.83	0.54			4.57	3.50
79.21*	412.0	5419.15	5422.56	5421.84	5422.94	0.003631	4.92	83.72	38.64	0.59			4.92	3.41
79.125*	412.0	5419.16	5422.44	5421.89	5422.90	0.004804	5.43	75.85	37.26	0.67			5.43	3.28
79.04	412.0	5419.17	5421.97	5421.97	5422.81	0.011595	7.36	55.96	33.84	1.01			7.36	2.80
78.77	412.0	5419.02	5421.45	5421.64	5422.45	0.016897	8.05	51.21	36.20	1.19			8.05	2.43
78.5	412.0	5418.74	5421.67	5421.23	5422.09	0.005178	5.18	79.49	44.85	0.69			5.18	2.93
78.375*	412.0	5418.54	5421.58	5421.10	5422.00	0.005041	5.21	79.06	43.28	0.68			5.21	3.04
78.25*	412.0	5418.35	5421.48	5421.00	5421.92	0.005181	5.34	77.19	41.49	0.69			5.34	3.13
78.125*	412.0	5418.15	5421.32	5420.92	5421.82	0.005934	5.68	72.59	39.22	0.74			5.68	3.17
78	412.0	5417.95	5420.85	5420.85	5421.69	0.011753	7.35	56.06	34.14	1.01			7.35	2.90
77.7966*	412.0	5417.52	5420.21	5420.51	5421.38	0.021075	8.69	47.42	35.27	1.32			8.69	2.69
77.5933*	412.0	5417.08	5420.34	5420.16	5421.04	0.008664	6.71	61.38	34.17	0.88			6.71	3.26
77.39	412.0	5416.65	5419.91	5419.91	5420.82	0.010892	7.66	53.79	28.70	0.99			7.66	3.26
77.2666*	412.0	5416.28	5419.19	5419.52	5420.55	0.019563	9.36	44.01	27.19	1.30			9.36	2.91
77.1433*	412.0	5415.91	5418.73	5419.19	5420.30	0.024459	10.07	40.91	26.90	1.44			10.07	2.82
77.02*	412.0	5415.54	5418.41	5418.84	5419.94	0.023811	9.93	41.49	27.35	1.42			9.93	2.87
76.8966*	412.0	5415.18	5419.25	5418.53	5419.69	0.003914	5.32	77.50	33.25	0.61			5.32	4.07
76.7733*	412.0	5414.81	5419.28	5418.22	5419.63	0.002604	4.71	87.52	32.83	0.51			4.71	4.47
76.65	412.0	5414.44	5419.29	5417.93	5419.58	0.001980	4.36	94.57	31.85	0.45			4.36	4.85
76.4666*	412.0	5414.50	5419.28	5417.85	5419.54	0.001749	4.06	101.44	35.19	0.42			4.06	4.78
76.2833*	412.0	5414.55	5419.27	5417.78	5419.49	0.001545	3.78	108.94	38.72	0.40			3.78	4.72
76.1	412.0	5414.61	5419.26	5417.69	5419.46	0.001362	3.53	116.56	43.81	0.37			3.53	4.65
75.984*	412.0	5414.62	5419.21	5417.82	5419.44	0.001702	3.84	107.26	40.34	0.42			3.84	4.59
75.868*	412.0	5414.64	5419.14	5417.92	5419.41	0.002159	4.22	97.68	38.19	0.46			4.22	4.50
75.752*	412.0	5414.65	5419.04	5418.02	5419.38	0.002817	4.69	87.83	35.62	0.53			4.69	4.39
75.6359*	412.0	5414.67	5418.90	5418.13	5419.34	0.003989	5.35	77.04	33.18	0.62			5.35	4.23
75.52	412.0	5414.68	5418.30	5418.30	5419.23	0.010841	7.70	53.48	28.10	0.98			7.70	3.62
75.3466*	412.0	5414.46	5417.91	5418.11	5418.97	0.015456	8.24	49.97	31.28	1.15			8.24	3.45
75.1733*	412.0	5414.24	5417.69	5417.87	5418.62	0.016914	7.74	53.20	39.38	1.17			7.74	3.45
75	412.0	5414.02	5417.26	5417.48	5418.24	0.025018	7.95	51.83	49.65	1.37			7.95	3.24
74.8*	412.0	5413.78	5417.70	5417.31	5418.06	0.005335	4.80	85.81	54.95	0.68			4.80	3.92
74.6*	412.0	5413.54	5417.67	5417.01	5417.95	0.003642	4.24	97.27	56.51	0.57			4.24	4.13
74.4	412.0	5413.30	5417.66	5416.74	5417.87	0.002348	3.68	112.02	57.86	0.47			3.68	4.36
74.2*	412.0	5413.27	5417.60	5416.67	5417.82	0.002548	3.77	109.24	57.82	0.48			3.77	4.33
74	412.0	5413.25	5417.50	5416.62	5417.77	0.002884	4.10	100.38	62.11	0.51			4.10	4.25
73.9166*	412.0	5413.20	5417.44	5416.64	5417.74	0.003348	4.39	93.77	74.74	0.55			4.39	4.24
73.8333*	412.0	5413.16	5417.35	5416.65	5417.71	0.004067	4.82	85.46	77.25	0.61			4.82	4.19
73.75	412.0	5413.11	5417.19	5416.71	5417.68	0.005450	5.59	73.67	71.11	0.70			5.59	4.08
73.5	412.0	5412.90	5416.89	5416.57	5417.53	0.007204	6.40	64.34	53.95	0.79			6.40	3.99
73.375*	412.0	5412.83	5416.93	5416.48	5417.38	0.005188	5.40	76.33	38.92	0.68			5.40	4.10
73.25	412.0	5412.76	5416.96	5416.33	5417.27	0.003686	4.51	91.30	47.26	0.57			4.51	4.20
73	412.0	5412.42	5416.70	5416.18	5417.15	0.004782	5.35	77.00	37.53	0.66			5.35	4.28
72.77	412.0	5412.16	5416.64	5416.08	5417.02	0.004436	4.97	82.98	42.50	0.63			4.97	4.48
72.615*	412.0	5412.04	5416.53	5415.80	5416.95	0.003979	5.17	79.64	35.07	0.60			5.17	4.49
72.46	412.0	5411.92	5416.41	5415.55	5416.88	0.003808	5.53	74.53	31.64	0.60			5.53	4.49
72.23	412.0	5411.71	5416.28	5415.70	5416.77	0.004909	5.63	73.16	42.67	0.67			5.63	4.56
72.1150*	412.0	5411.76	5416.01	5415.70	5416.68	0.007614	6.57	62.70	31.91	0.83			6.57	4.25
72	412.0	5411.82	5415.87	5415.63	5416.60	0.008129	6.88	59.86	29.66	0.85			6.88	4.05
71.78	412.0	5411.71	5415.64	5415.64	5416.37	0.012247	6.86	60.07	41.55	1.01			6.86	3.93
71.6866*	412.0	5411.68	5415.27	5415.52	5416.23	0.019426	7.86	52.42	41.97	1.24			7.86	3.59
71.5933*	412.0	5411.66	5415.54	5415.38	5416.03	0.008502	5.60	73.51	52.63	0.84			5.60	3.88
71.5	412.0	5411.63	5415.52	5415.24	5415.91	0.006497	5.05	81.57	55.23	0.73			5.05	3.89
71.375*	412.0	5411.50	5415.39	5415.11	5415.82	0.007024	5.30	77.73	52.21	0.77			5.30	3.89
71.25*	412.0	5411.37	5415.30	5415.01	5415.72	0.006315	5.23	78.84	50.03	0.73			5.23	3.93
71.125*	412.0	5411.23	5415.26	5414.76	5415.62	0.004539	4.81	85.62	47.26	0.63			4.81	4.03

Profile Output Table - No Name Arroyo Undisturbed Channel 10yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71	412.0	5411.10	5415.26	5414.01	5415.54	0.002986	4.30	95.75	44.30	0.52			4.30	4.16
70.875*	412.0	5411.04	5415.16	5414.46	5415.50	0.004220	4.64	88.78	49.87	0.61			4.64	4.12
70.75	412.0	5410.97	5414.29	5414.29	5415.35	0.010640	8.26	49.90	33.31	0.99			8.26	3.32
70.65*	412.0	5410.80	5413.95	5414.34	5415.18	0.016095	8.91	46.22	31.70	1.19			8.91	3.15
70.55*	412.0	5410.62	5413.55	5414.06	5414.97	0.028716	9.57	43.05	34.61	1.51			9.57	2.93
70.45*	412.0	5410.45	5413.11	5413.69	5414.66	0.038694	10.01	41.17	38.56	1.71			10.01	2.66
70.35	412.0	5410.28	5413.93	5413.19	5414.18	0.003306	4.04	101.89	57.76	0.54			4.04	3.65
70.175*	412.0	5410.25	5413.77	5413.36	5414.11	0.005045	4.71	87.40	55.19	0.66			4.71	3.52
70	412.0	5410.21	5413.72	5413.11	5414.02	0.003664	4.39	93.75	50.68	0.57			4.39	3.51
69.75*	412.0	5409.81	5413.69	5412.71	5413.94	0.002319	3.97	103.77	47.11	0.47			3.97	3.88
69.5	412.0	5409.42	5413.54	5412.43	5413.86	0.003411	4.50	91.46	45.34	0.56			4.50	4.12
69.3333*	412.0	5409.23	5413.45	5412.65	5413.78	0.003763	4.67	88.31	44.91	0.59			4.67	4.22
69.1666*	412.0	5409.05	5413.33	5412.69	5413.71	0.004087	4.89	84.21	42.20	0.61			4.89	4.28
69	412.0	5408.86	5413.16	5412.64	5413.62	0.005002	5.39	76.46	37.77	0.67			5.39	4.30
68.75*	412.0	5408.79	5413.06	5412.44	5413.48	0.005099	5.21	79.03	42.56	0.67			5.21	4.26
68.5	412.0	5408.71	5412.92	5412.37	5413.36	0.004842	5.31	77.66	46.01	0.66			5.31	4.21
68.375*	412.0	5408.70	5412.86	5412.19	5413.30	0.004660	5.32	77.44	45.48	0.66			5.32	4.16
68.25	412.0	5408.69	5412.87	5412.10	5413.21	0.003406	4.65	88.69	51.22	0.57			4.65	4.18
68.13	412.0	5408.63	5412.98	5411.57	5413.13	0.001183	3.08	133.80	52.68	0.34			3.08	4.35
67.99	412.0	5408.63	5412.91	5411.58	5413.11	0.002024	3.55	116.17	56.31	0.44			3.55	4.28
67.89*	412.0	5408.63	5412.81	5411.67	5413.08	0.002366	4.21	97.92	41.11	0.48			4.21	4.18
67.79	412.0	5408.63	5412.46	5411.86	5413.02	0.004885	6.00	68.65	27.97	0.68			6.00	3.83
67.65	412.0	5408.40	5412.20	5411.85	5412.93	0.006937	6.89	59.79	25.83	0.80			6.89	3.80
67.4	412.0	5408.12	5412.20	5411.69	5412.71	0.005415	5.76	71.48	34.01	0.70			5.76	4.08
67.2*	412.0	5407.92	5412.15	5411.55	5412.59	0.004397	5.31	77.57	36.37	0.64			5.31	4.23
67	412.0	5407.73	5412.10	5411.42	5412.50	0.003800	5.02	82.14	37.68	0.60			5.02	4.37
66.75*	412.0	5407.68	5412.01	5411.23	5412.40	0.003663	5.03	81.88	36.52	0.59			5.03	4.33
66.5	412.0	5407.63	5411.90	5411.10	5412.31	0.003781	5.17	79.76	34.95	0.60			5.17	4.27
66.255*	412.0	5407.58	5411.70	5411.08	5412.21	0.004816	5.71	72.17	32.46	0.67			5.71	4.12
66.01	412.0	5407.52	5411.47	5411.06	5412.08	0.006214	6.24	66.04	30.23	0.74			6.24	3.95
65.84*	412.0	5407.39	5411.08	5410.94	5411.92	0.009423	7.34	56.12	28.37	0.92			7.34	3.69
65.67*	412.0	5407.25	5410.87	5410.72	5411.72	0.009287	7.40	55.64	27.77	0.92			7.40	3.62
65.5	412.0	5407.12	5410.89	5410.50	5411.52	0.006225	6.38	64.54	29.67	0.76			6.38	3.77
65.25*	412.0	5406.85	5410.84	5410.34	5411.34	0.005265	5.71	72.16	34.84	0.70			5.71	3.99
65	412.0	5406.58	5410.40	5410.33	5411.14	0.010119	6.90	59.68	35.19	0.93			6.90	3.82
64.8*	412.0	5406.58	5410.27	5410.04	5410.93	0.007837	6.51	63.29	33.92	0.84			6.51	3.69
64.6*	412.0	5406.58	5410.15	5409.80	5410.76	0.006951	6.31	65.26	33.54	0.80			6.31	3.56
64.4	412.0	5406.58	5410.01	5409.66	5410.63	0.006868	6.32	65.22	33.05	0.79			6.32	3.43
64.175*	412.0	5406.38	5410.06	5409.50	5410.43	0.004520	4.88	84.44	46.45	0.64			4.88	3.68
63.95	412.0	5406.17	5410.10	5409.32	5410.31	0.002599	3.63	113.47	63.90	0.48			3.63	3.93
63.7633*	412.0	5405.99	5410.00	5409.31	5410.24	0.003161	3.99	103.28	58.93	0.53			3.99	4.00
63.5766*	412.0	5405.81	5409.86	5409.24	5410.16	0.003810	4.37	94.28	54.25	0.58			4.37	4.05
63.39	412.0	5405.63	5409.73	5409.13	5410.07	0.004314	4.71	87.54	49.52	0.62			4.71	4.09
63.2066*	412.0	5405.46	5409.71	5408.90	5409.98	0.003095	4.22	97.74	50.82	0.54			4.22	4.25
63.0233*	412.0	5405.30	5409.71	5408.60	5409.92	0.001988	3.69	111.77	50.80	0.44			3.69	4.41
62.84	412.0	5405.13	5409.71	5408.16	5409.87	0.001265	3.23	127.64	50.06	0.36			3.23	4.58
62.6	412.0	5405.13	5409.71	5407.96	5409.84	0.000886	2.82	146.18	53.96	0.30			2.82	4.58
62.475*	412.0	5405.13	5409.61	5408.34	5409.81	0.001641	3.59	114.78	46.84	0.40			3.59	4.48
62.35	412.0	5405.13	5409.40	5408.47	5409.77	0.003217	4.90	84.13	34.72	0.55			4.90	4.26
62.175*	412.0	5405.10	5409.31	5408.56	5409.71	0.003923	5.03	81.83	38.36	0.61			5.03	4.21
62	412.0	5405.08	5409.20	5408.65	5409.63	0.004741	5.24	78.57	39.96	0.66			5.24	4.12
61.75*	412.0	5405.03	5408.83	5408.56	5409.46	0.007559	6.37	64.72	35.03	0.83			6.37	3.80
61.5	412.0	5404.98	5408.67	5408.28	5409.28	0.006447	6.30	65.37	31.56	0.77			6.30	3.69
61.25*	412.0	5404.82	5408.57	5408.11	5409.10	0.005655	5.79	71.14	35.80	0.72			5.79	3.75
61	412.0	5404.66	5408.60	5407.82	5408.93	0.003375	4.60	89.58	43.45	0.56			4.60	3.94
60.75*	412.0	5404.53	5408.56	5407.56	5408.84	0.002539	4.23	97.29	43.11	0.50			4.23	4.03
60.5	412.0	5404.39	5408.50	5407.33	5408.77	0.002204	4.13	99.80	41.04	0.47			4.13	4.11
60.25*	412.0	5404.26	5408.35	5407.41	5408.70	0.003050	4.75	86.82	36.94	0.55			4.75	4.09
60	412.0	5404.13	5408.11	5407.43	5408.61	0.004478	5.63	73.19	31.94	0.66			5.63	3.98
59.75*	412.0	5404.00	5408.04	5407.28	5408.48	0.004043	5.29	77.87	34.60	0.62			5.29	4.04
59.5	412.0	5403.88	5407.91	5407.20	5408.37	0.004515	5.45	75.59	34.57	0.65			5.45	4.03
59.25*	412.0	5403.84	5407.79	5407.18	5408.26	0.004690	5.47	75.32	35.76	0.66			5.47	3.95
59	412.0	5403.80	5407.69	5407.09	5408.13	0.004593	5.32	77.40	37.58	0.65			5.32	3.89
58.82*	412.0	5403.67	5407.63	5406.86	5408.04	0.003936	5.11	80.58	37.10	0.61			5.11	3.96
58.64*	412.0	5403.54	5407.57	5406.77	5407.96	0.003537	4.98	82.65	44.89	0.58			4.98	4.03
58.46	412.0	5403.41	5407.51	5406.57	5407.89	0.003368	4.94	83.37	46.47	0.57			4.94	4.10
58.23*	412.0	5403.30	5407.42	5406.54	5407.80	0.003421	4.95	83.31	52.66	0.57			4.95	4.12
58	412.0	5403.19	5407.32	5406.44	5407.72	0.003646	5.05	81.66	54.68	0.59			5.05	4.13
57.8825*	412.0	5403.17	5407.29	5406.39	5407.67	0.003345	4.94	83.44	70.92	0.57			4.94	4.12
57.765*	412.0	5403.16	5407.26	5406.34	5407.63	0.003139	4.88	84.36	101.04	0.55			4.88	4.10
57.6475*	412.0	5403.14	5407.22	5406.26	5407.59	0.003049	4.89	84.33	100.42	0.55			4.89	4.08

Profile Output Table - No Name Arroyo Undisturbed Channel 10yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.53	412.0	5403.12	5407.18	5406.22	5407.56	0.003076	4.94	83.33	98.46	0.55			4.94	4.06
57.38	412.0	5403.07	5407.33	5406.15	5407.46	0.001021	3.45	172.23	85.09	0.34	1.60	1.28	2.39	4.26
57.23	412.0	5403.06	5407.23	5405.77	5407.44	0.001420	3.71	116.29	46.42	0.39	0.08	1.18	3.54	4.17
57	412.0	5403.03	5406.97	5406.02	5407.37	0.003509	5.11	80.64	33.88	0.58			5.11	3.94
56.75*	412.0	5402.90	5406.83	5406.05	5407.28	0.003897	5.33	77.25	32.97	0.61			5.33	3.93
56.5	412.0	5402.77	5406.69	5405.92	5407.18	0.004034	5.57	74.10	65.37	0.63	0.17	0.39	5.56	3.92
56.375*	412.0	5402.67	5406.62	5405.89	5407.11	0.004071	5.67	73.88	82.11	0.63	0.51	0.75	5.58	3.95
56.25*	412.0	5402.58	5406.59	5405.87	5407.05	0.003700	5.54	89.32	114.66	0.61	0.66	1.00	4.61	4.01
56.125*	412.0	5402.48	5406.57	5405.86	5406.98	0.003233	5.31	105.44	132.84	0.57	0.86	1.10	3.91	4.09
56	412.0	5402.38	5406.56	5405.89	5406.90	0.002724	5.01	125.65	154.59	0.53	0.95	1.15	3.28	4.18
55.875*	412.0	5402.38	5406.56	5405.92	5406.84	0.002262	4.65	145.72	164.08	0.48	1.02	1.07	2.83	4.18
55.75*	412.0	5402.38	5406.57	5405.69	5406.79	0.001845	4.27	166.50	167.83	0.44	1.07	0.98	2.47	4.19
55.625*	412.0	5402.38	5406.58	5405.62	5406.75	0.001530	3.95	187.53	175.25	0.40	1.08	0.91	2.20	4.19
55.5	412.0	5402.38	5405.75	5405.60	5406.65	0.008341	7.59	55.30	105.01	0.88	0.61	1.23	7.45	3.37
55.375*	412.0	5402.38	5405.77	5405.43	5406.48	0.006468	6.73	62.32	126.95	0.78	0.61	1.11	6.61	3.39
55.25*	412.0	5402.38	5405.78	5405.28	5406.35	0.005288	6.09	68.79	144.84	0.71	0.58	1.03	5.99	3.40
55.125*	412.0	5402.38	5405.76	5405.23	5406.25	0.004565	5.62	74.40	158.62	0.66	0.55	0.94	5.54	3.38
55	412.0	5402.38	5405.75	5405.14	5406.17	0.003997	5.22	79.94	173.90	0.62	0.51	0.88	5.15	3.37
54.875*	412.0	5402.38	5405.91	5405.13	5406.06	0.001690	3.56	192.38	198.47	0.41	1.04	0.59	2.14	3.53
54.75*	412.0	5402.38	5405.20	5405.10	5405.96	0.010004	7.00	58.83	128.03	0.94			7.00	2.82
54.625*	412.0	5402.37	5405.44	5405.13	5405.74	0.004173	4.88	131.90	169.48	0.62	1.31		3.12	3.07
54.5	412.0	5402.37	5405.21	5405.21	5405.64	0.006521	5.71	108.54	152.86	0.76	1.48		3.80	2.84
54.25*	412.0	5402.29	5405.09	5405.03	5405.46	0.005564	5.49	118.53	150.96	0.71	1.57		3.48	2.80
54	412.0	5402.20	5404.87	5404.87	5405.27	0.006472	5.87	114.66	151.66	0.76	1.76	0.43	3.59	2.67
53.8233*	412.0	5402.10	5404.51	5404.71	5405.13	0.012301	7.08	90.74	148.83	1.02	1.95	0.39	4.54	2.41
53.6466*	412.0	5402.01	5404.58	5404.53	5404.86	0.005725	5.03	138.43	188.39	0.71	1.71	1.12	2.98	2.57
53.47	412.0	5401.91	5404.54	5404.34	5404.71	0.003901	4.10	172.02	213.43	0.58	1.57	1.30	2.40	2.63
Max							10.07						Avg	5.50
Min							2.56							
Avg							5.50							

The undisturbed channel reaches following outside of the reconstructed channel reaches were not included in determining the maximum, minimum, and average velocities. The reconstructed reaches are from Station 81.50 to 72.23 and from Station 71.00 to 67.00.

Profile Output Table - No Name Arroyo Undisturbed Channel 25yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92	655.0	5430.37	5437.09	5432.34	5437.13	0.000116	1.52	458.76	165.47	0.12	0.16	0.20	1.43	6.72
91.8925*	655.0	5430.22	5437.07	5432.64	5437.13	0.000184	1.86	355.17	134.42	0.15	0.21		1.84	6.85
91.785*	655.0	5430.07	5437.04	5433.01	5437.12	0.000300	2.32	286.16	75.08	0.19	0.27		2.29	6.97
91.6775*	655.0	5429.92	5436.97	5433.44	5437.11	0.000540	3.00	221.71	59.87	0.25	0.36		2.95	7.05
91.57	655.0	5429.77	5436.82	5433.99	5437.09	0.001173	4.15	159.88	46.14	0.36	0.46		4.10	7.05
91.465*	655.0	5429.59	5436.71	5434.36	5437.07	0.001617	4.77	141.32	44.69	0.42	0.73		4.63	7.12
91.36*	655.0	5429.42	5436.56	5434.73	5437.03	0.002303	5.56	123.39	49.49	0.49	1.05		5.31	7.14
91.255*	655.0	5429.25	5436.32	5435.06	5436.99	0.003489	6.64	105.01	48.75	0.60	1.41		6.24	7.07
91.15	655.0	5429.07	5435.34	5435.34	5436.86	0.009933	9.90	67.99	34.52	0.96	1.59		9.63	6.27
91.0533*	655.0	5428.81	5433.64	5434.60	5436.59	0.028922	13.78	47.55	20.52	1.60			13.78	4.83
90.9566*	655.0	5428.55	5432.99	5434.02	5436.22	0.037182	14.43	45.40	22.58	1.79			14.43	4.44
90.86	655.0	5428.29	5432.53	5433.61	5435.80	0.042832	14.51	45.13	26.42	1.90			14.51	4.24
90.6	655.0	5427.43	5431.67	5432.71	5434.84	0.031841	14.29	45.83	37.27	1.68			14.29	4.24
90.45*	655.0	5426.88	5430.62	5431.79	5434.27	0.041795	15.33	42.73	33.76	1.91			15.33	3.74
90.3	655.0	5426.33	5429.58	5430.81	5433.54	0.048513	15.97	41.02	21.86	2.05			15.97	3.24
90.2*	655.0	5426.29	5428.84	5430.02	5432.94	0.067914	16.26	40.29	27.77	2.38			16.26	2.54
90.1*	655.0	5426.25	5428.31	5429.36	5432.09	0.078002	15.60	41.98	34.56	2.49			15.60	2.06
90	655.0	5426.21	5427.88	5428.80	5431.15	0.078772	14.51	45.13	41.87	2.46			14.51	1.66
89.875*	655.0	5425.98	5427.97	5428.66	5430.19	0.040553	11.97	54.74	41.23	1.83			11.97	1.99
89.75*	655.0	5425.75	5428.10	5428.53	5429.67	0.022581	10.06	65.08	40.90	1.41			10.06	2.35
89.625*	655.0	5425.52	5428.21	5428.43	5429.43	0.014640	8.85	73.98	40.53	1.15			8.85	2.69
89.5	655.0	5425.29	5428.09	5428.33	5429.35	0.014702	9.02	72.64	38.60	1.16			9.02	2.80
89.4166*	655.0	5425.08	5428.41	5428.14	5429.18	0.007368	7.05	92.90	42.47	0.84			7.05	3.33
89.3333*	655.0	5424.87	5428.46	5427.91	5429.08	0.005133	6.29	104.14	42.94	0.71			6.29	3.59
89.25	655.0	5424.66	5428.50	5427.68	5429.01	0.003781	5.77	113.44	41.96	0.62			5.77	3.83
89.125*	655.0	5424.40	5428.63	5427.40	5428.90	0.002012	4.22	155.19	58.24	0.46			4.22	4.23
89	655.0	5424.13	5428.66	5427.11	5428.86	0.001540	3.54	185.27	74.47	0.39			3.54	4.53
88.8266*	655.0	5423.95	5428.65	5427.31	5428.83	0.001540	3.36	194.83	84.91	0.39			3.36	4.70
88.6533*	655.0	5423.77	5428.63	5427.43	5428.79	0.001693	3.27	200.34	97.89	0.40			3.27	4.86
88.48	655.0	5423.59	5428.60	5427.34	5428.76	0.001905	3.25	201.30	108.03	0.42			3.25	5.01
88.2400*	655.0	5423.60	5428.51	5427.21	5428.72	0.001646	3.70	176.81	69.73	0.41			3.70	4.91
88	655.0	5423.60	5428.16	5427.17	5428.64	0.003160	5.59	117.21	39.50	0.57			5.59	4.55
87.875*	655.0	5423.66	5428.06	5427.21	5428.61	0.003719	5.91	110.83	38.99	0.62			5.91	4.40
87.75*	655.0	5423.72	5427.96	5427.27	5428.57	0.004424	6.27	104.42	38.41	0.67			6.27	4.24
87.625*	655.0	5423.78	5427.82	5427.25	5428.52	0.005361	6.70	97.74	37.67	0.73			6.70	4.04
87.5	655.0	5423.84	5427.32	5427.32	5428.40	0.010212	8.36	78.33	35.23	0.99			8.36	3.47
87.3333*	655.0	5423.84	5426.89	5427.09	5428.21	0.014020	9.22	71.02	35.17	1.14			9.22	3.05
87.1666*	655.0	5423.84	5427.03	5426.89	5427.99	0.008815	7.86	83.34	36.90	0.92			7.86	3.19
87	655.0	5423.84	5426.92	5426.69	5427.81	0.008110	7.61	86.09	37.43	0.88			7.61	3.07
86.74	655.0	5423.82	5426.76	5426.59	5427.57	0.008103	7.23	90.64	42.73	0.87			7.23	2.94
86.62*	655.0	5423.73	5426.88	5426.55	5427.39	0.006102	5.74	114.17	62.05	0.75			5.74	3.15
86.5	655.0	5423.64	5426.77	5426.62	5427.31	0.009407	5.91	110.88	79.94	0.88			5.91	3.13
86.3849*	655.0	5423.55	5426.83	5426.18	5427.19	0.003737	4.80	136.37	66.80	0.59			4.80	3.28
86.27	655.0	5423.47	5426.71	5425.91	5427.15	0.003497	5.38	121.84	58.77	0.59			5.38	3.23
86.1349*	655.0	5423.31	5426.55	5425.91	5427.09	0.004545	5.92	110.70	45.21	0.67			5.92	3.24
86	655.0	5423.15	5426.20	5425.97	5426.98	0.007677	7.09	92.35	42.65	0.85			7.09	3.05
85.8*	655.0	5422.90	5426.17	5425.73	5426.81	0.005695	6.40	102.29	44.25	0.74			6.40	3.27
85.6	655.0	5422.64	5426.15	5425.52	5426.67	0.004349	5.81	112.77	46.09	0.65			5.81	3.51
85.35*	655.0	5422.58	5426.02	5425.43	5426.56	0.004530	5.91	110.81	45.62	0.67			5.91	3.44
85.1*	655.0	5422.52	5425.89	5425.32	5426.45	0.004755	6.04	108.44	44.79	0.68			6.04	3.36
84.85	655.0	5422.46	5425.75	5425.22	5426.33	0.004976	6.16	106.38	44.12	0.70			6.16	3.28
84.6833*	655.0	5422.36	5425.69	5425.19	5426.22	0.005005	5.84	112.18	51.20	0.70			5.84	3.33
84.5166*	655.0	5422.27	5425.59	5425.23	5426.12	0.006319	5.88	111.32	60.31	0.76			5.88	3.32
84.35	655.0	5422.17	5425.47	5425.17	5426.02	0.006989	5.95	110.12	62.66	0.79			5.95	3.30
84.2333*	655.0	5422.17	5425.62	5424.85	5425.88	0.002834	4.10	159.57	81.33	0.52			4.10	3.45
84.1166*	655.0	5422.17	5425.64	5424.70	5425.83	0.002028	3.45	189.87	97.90	0.44			3.45	3.47
84	655.0	5422.17	5425.62	5424.52	5425.80	0.001603	3.38	193.98	108.86	0.40			3.38	3.45
83.75	655.0	5422.39	5425.58	5424.63	5425.76	0.001862	3.46	189.22	185.44	0.42			3.46	3.18
83.625*	655.0	5422.08	5425.64	5423.93	5425.71	0.000546	2.12	308.25	123.45	0.24			2.12	3.56
83.5	655.0	5421.77	5425.67	5423.32	5425.70	0.000179	1.36	482.60	163.66	0.14			1.36	3.90
83.3849*	655.0	5421.42	5425.62	5423.49	5425.69	0.000435	2.13	307.58	102.94	0.22			2.13	4.20
83.27	655.0	5421.08	5425.25	5424.14	5425.65	0.002596	5.07	129.27	43.98	0.52			5.07	4.17
83	655.0	5420.96	5425.19	5424.09	5425.57	0.002587	4.95	132.21	46.29	0.52			4.95	4.23
82.8825*	655.0	5420.96	5425.27	5423.78	5425.49	0.001404	3.75	174.52	59.43	0.39			3.75	4.31
82.765*	655.0	5420.96	5425.31	5423.63	5425.46	0.000960	3.11	210.81	72.07	0.32			3.11	4.35
82.6475*	655.0	5420.97	5425.32	5423.47	5425.44	0.000746	2.71	241.93	84.35	0.28			2.71	4.35
82.53	655.0	5420.97	5425.33	5423.34	5425.42	0.000628	2.44	268.35	96.24	0.26			2.44	4.36
82.3999*	655.0	5420.95	5425.27	5423.33	5425.41	0.000795	2.94	222.47	71.38	0.29			2.94	4.32
82.27	655.0	5420.93	5425.08	5423.60	5425.38	0.001804	4.42	148.35	46.37	0.44			4.42	4.14
82.1349*	655.0	5421.01	5424.93	5423.83	5425.34	0.002716	5.14	127.40	43.35	0.53			5.14	3.92
82	655.0	5421.09	5424.61	5424.11	5425.27	0.005297	6.51	100.59	39.88	0.72			6.51	3.52

Profile Output Table - No Name Arroyo Undisturbed Channel 25yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	655.0	5421.00	5424.51	5424.08	5425.20	0.005807	6.65	98.57	40.92	0.75			6.65	3.51
81.75*	655.0	5420.92	5424.41	5424.05	5425.13	0.006402	6.78	96.55	42.07	0.79			6.78	3.49
81.625*	655.0	5420.83	5424.31	5424.03	5425.05	0.007028	6.94	94.41	42.70	0.82			6.94	3.47
81.5	655.0	5420.74	5424.19	5423.98	5424.98	0.007815	7.13	91.84	43.03	0.86			7.13	3.45
81.25	655.0	5420.44	5424.25	5423.58	5424.74	0.004168	5.63	116.34	126.18	0.64			5.63	3.81
81.125*	655.0	5420.06	5424.41	5423.13	5424.62	0.001579	3.72	176.30	67.11	0.40			3.72	4.35
81	655.0	5419.68	5424.46	5422.73	5424.58	0.000842	2.80	233.98	85.22	0.30			2.80	4.78
80.875*	655.0	5419.60	5424.35	5422.86	5424.56	0.001439	3.67	178.44	64.42	0.39			3.67	4.75
80.75	655.0	5419.53	5423.99	5423.19	5424.50	0.003813	5.73	114.29	43.34	0.62			5.73	4.46
80.5	655.0	5419.47	5423.71	5423.15	5424.37	0.005299	6.53	100.30	39.95	0.73			6.53	4.24
80.25*	655.0	5419.47	5423.61	5422.99	5424.23	0.004880	6.36	102.93	40.03	0.70			6.36	4.14
80	655.0	5419.47	5423.52	5422.81	5424.11	0.004295	6.16	106.36	39.24	0.66			6.16	4.05
79.775*	655.0	5419.29	5423.54	5422.50	5423.98	0.002956	5.33	122.86	42.58	0.55			5.33	4.25
79.55	655.0	5419.11	5423.56	5422.21	5423.90	0.002060	4.63	141.56	50.50	0.47			4.63	4.45
79.465*	655.0	5419.12	5423.51	5422.26	5423.88	0.002337	4.86	134.78	47.32	0.50			4.86	4.39
79.38*	655.0	5419.13	5423.45	5422.34	5423.86	0.002702	5.13	127.63	43.94	0.53			5.13	4.32
79.295*	655.0	5419.14	5423.37	5422.41	5423.83	0.003170	5.44	120.43	42.92	0.57			5.44	4.23
79.21*	655.0	5419.15	5423.28	5422.48	5423.80	0.003828	5.81	112.66	41.89	0.62			5.81	4.13
79.125*	655.0	5419.16	5423.15	5422.54	5423.77	0.004929	6.35	103.23	40.74	0.70			6.35	3.99
79.04	655.0	5419.17	5422.62	5422.62	5423.68	0.010696	8.29	79.00	38.40	1.01			8.29	3.45
78.77	655.0	5419.02	5421.95	5422.23	5423.31	0.016736	9.35	70.07	39.10	1.23			9.35	2.93
78.5	655.0	5418.74	5422.41	5421.78	5422.91	0.004573	5.69	115.07	61.00	0.67			5.69	3.67
78.375*	655.0	5418.54	5422.31	5421.70	5422.83	0.004616	5.80	113.00	49.22	0.67			5.80	3.77
78.25*	655.0	5418.35	5422.20	5421.61	5422.76	0.004864	6.00	109.16	46.79	0.69			6.00	3.85
78.125*	655.0	5418.15	5422.03	5421.58	5422.67	0.005609	6.40	102.29	44.01	0.74			6.40	3.88
78	655.0	5417.95	5421.54	5421.54	5422.54	0.010642	8.05	81.41	40.03	0.99			8.05	3.59
77.7966*	655.0	5417.52	5420.75	5421.09	5422.22	0.018585	9.74	67.26	38.21	1.29			9.74	3.23
77.5933*	655.0	5417.08	5421.31	5420.85	5422.00	0.005869	6.65	98.54	41.35	0.76			6.65	4.23
77.39	655.0	5416.65	5420.64	5420.64	5421.79	0.010347	8.59	76.22	32.69	0.99			8.59	3.99
77.2666*	655.0	5416.28	5419.86	5420.25	5421.52	0.017608	10.36	63.22	30.78	1.27			10.36	3.58
77.1433*	655.0	5415.91	5419.34	5419.91	5421.29	0.022341	11.22	58.35	30.28	1.42			11.22	3.43
77.02*	655.0	5415.54	5418.95	5419.55	5420.99	0.024167	11.46	57.16	30.59	1.48			11.46	3.41
76.8966*	655.0	5415.18	5420.14	5419.22	5420.71	0.003699	6.06	108.11	36.16	0.62			6.06	4.96
76.7733*	655.0	5414.81	5420.16	5418.91	5420.64	0.002763	5.58	117.41	35.26	0.54			5.58	5.35
76.65	655.0	5414.44	5420.16	5418.63	5420.60	0.002291	5.31	123.27	33.89	0.49			5.31	5.72
76.4666*	655.0	5414.50	5420.16	5418.53	5420.54	0.001952	4.90	133.68	37.53	0.46			4.90	5.66
76.2833*	655.0	5414.55	5420.17	5418.43	5420.48	0.001672	4.53	144.61	41.14	0.43			4.53	5.61
76.1	655.0	5414.61	5420.16	5418.38	5420.44	0.001454	4.21	155.56	50.85	0.40			4.21	5.55
75.984*	655.0	5414.62	5420.10	5418.47	5420.42	0.001772	4.53	144.56	45.18	0.44			4.53	5.48
75.868*	655.0	5414.64	5420.02	5418.60	5420.39	0.002221	4.92	133.09	41.84	0.49			4.92	5.38
75.752*	655.0	5414.65	5419.91	5418.73	5420.36	0.002920	5.43	120.60	40.17	0.55			5.43	5.25
75.6359*	655.0	5414.67	5419.74	5418.89	5420.32	0.004030	6.13	106.89	37.67	0.64			6.13	5.07
75.52	655.0	5414.68	5419.05	5419.05	5420.20	0.010340	8.63	75.88	32.31	0.99			8.63	4.37
75.3466*	655.0	5414.46	5418.38	5418.76	5419.93	0.018878	10.01	65.41	35.50	1.30			10.01	3.92
75.1733*	655.0	5414.24	5418.00	5418.44	5419.53	0.024622	9.94	65.92	44.51	1.44			9.94	3.76
75	655.0	5414.02	5418.61	5418.01	5419.05	0.004189	5.27	124.23	57.24	0.63			5.27	4.59
74.8*	655.0	5413.78	5418.60	5417.77	5418.95	0.003181	4.75	137.78	60.52	0.56			4.75	4.82
74.6*	655.0	5413.54	5418.59	5417.55	5418.87	0.002396	4.28	153.19	63.92	0.49			4.28	5.05
74.4	655.0	5413.30	5418.59	5417.26	5418.82	0.001806	3.85	170.21	67.36	0.43			3.85	5.29
74.2*	655.0	5413.27	5418.54	5417.20	5418.78	0.001790	3.89	168.22	65.54	0.43			3.89	5.27
74	655.0	5413.25	5418.47	5417.21	5418.74	0.002192	4.21	155.46	130.66	0.47			4.21	5.22
73.9166*	655.0	5413.20	5418.40	5417.24	5418.72	0.002440	4.54	144.31	104.14	0.49			4.54	5.20
73.8333*	655.0	5413.16	5418.30	5417.32	5418.70	0.002958	5.06	129.32	92.58	0.54			5.06	5.14
73.75	655.0	5413.11	5418.08	5417.35	5418.65	0.004329	6.04	108.45	82.27	0.65			6.04	4.97
73.5	655.0	5412.90	5417.65	5417.25	5418.49	0.006657	7.33	89.32	59.53	0.79			7.33	4.75
73.375*	655.0	5412.83	5417.80	5417.03	5418.33	0.004116	5.89	111.29	45.45	0.63			5.89	4.96
73.25	655.0	5412.76	5417.88	5416.83	5418.24	0.002676	4.82	135.92	49.64	0.51			4.82	5.12
73	655.0	5412.42	5417.61	5416.76	5418.14	0.003845	5.81	112.78	41.00	0.62			5.81	5.19
72.77	655.0	5412.16	5417.60	5416.62	5418.02	0.003121	5.24	125.09	46.14	0.55			5.24	5.44
72.615*	655.0	5412.04	5417.45	5416.45	5417.97	0.003469	5.79	113.11	37.41	0.59			5.79	5.41
72.46	655.0	5411.92	5417.22	5416.30	5417.92	0.004253	6.67	98.13	37.02	0.65			6.67	5.30
72.23	655.0	5411.71	5417.34	5416.46	5417.74	0.003249	5.05	129.65	50.78	0.56			5.05	5.63
72.1150*	655.0	5411.76	5417.12	5416.52	5417.68	0.004799	5.98	109.46	45.41	0.68			5.98	5.36
72	655.0	5411.82	5416.37	5416.37	5417.54	0.010654	8.69	75.37	32.11	1.00			8.69	4.55
71.78	655.0	5411.71	5415.86	5416.20	5417.22	0.021761	9.38	69.82	46.59	1.35			9.38	4.15
71.6866*	655.0	5411.68	5415.75	5416.02	5416.94	0.019011	8.77	74.65	49.94	1.26			8.77	4.07
71.5933*	655.0	5411.66	5416.00	5415.83	5416.69	0.008542	6.66	98.40	54.41	0.87			6.66	4.34
71.5	655.0	5411.63	5416.01	5415.70	5416.57	0.006512	6.00	109.13	56.88	0.76			6.00	4.38
71.375*	655.0	5411.50	5415.85	5415.62	5416.49	0.007433	6.39	102.44	54.01	0.82			6.39	4.35
71.25*	655.0	5411.37	5415.73	5415.48	5416.39	0.007304	6.48	101.02	51.48	0.82			6.48	4.36
71.125*	655.0	5411.23	5415.67	5415.28	5416.27	0.005993	6.22	105.34	48.42	0.74			6.22	4.44

Profile Output Table - No Name Arroyo Undisturbed Channel 25yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71	655.0	5411.10	5415.65	5414.99	5416.17	0.004450	5.77	113.57	45.39	0.64			5.77	4.55
70.875*	655.0	5411.04	5415.53	5415.14	5416.11	0.005913	6.09	107.54	51.61	0.74			6.09	4.49
70.75	655.0	5410.97	5415.10	5415.10	5415.99	0.011304	7.57	86.55	48.66	1.00			7.57	4.13
70.65*	655.0	5410.80	5414.53	5414.87	5415.81	0.021541	9.10	71.97	50.27	1.34			9.10	3.73
70.55*	655.0	5410.62	5414.10	5414.52	5415.58	0.029228	9.76	67.08	53.24	1.53			9.76	3.48
70.45*	655.0	5410.45	5413.67	5414.17	5415.27	0.031539	10.14	64.61	50.88	1.59			10.14	3.22
70.35	655.0	5410.28	5414.76	5413.73	5415.05	0.002480	4.32	151.53	62.31	0.49			4.32	4.48
70.175*	655.0	5410.25	5414.64	5413.84	5415.00	0.003126	4.78	137.02	58.60	0.55			4.78	4.39
70	655.0	5410.21	5414.61	5413.60	5414.94	0.002665	4.61	142.19	56.11	0.51			4.61	4.40
69.75*	655.0	5409.81	5414.57	5413.27	5414.87	0.002119	4.43	147.75	53.01	0.47			4.43	4.76
69.5	655.0	5409.42	5414.45	5413.23	5414.81	0.002895	4.79	136.79	54.48	0.53			4.79	5.03
69.3333*	655.0	5409.23	5414.37	5413.35	5414.74	0.002910	4.94	132.52	50.60	0.54			4.94	5.13
69.1666*	655.0	5409.05	5414.26	5413.29	5414.68	0.003140	5.23	125.14	46.12	0.56			5.23	5.21
69	655.0	5408.86	5414.08	5413.23	5414.61	0.003882	5.80	112.91	41.64	0.62			5.80	5.22
68.75*	655.0	5408.79	5414.06	5413.16	5414.48	0.003351	5.18	126.57	58.19	0.57			5.18	5.27
68.5	655.0	5408.71	5413.95	5413.00	5414.40	0.003353	5.39	121.58	56.86	0.58			5.39	5.24
68.375*	655.0	5408.70	5413.94	5413.01	5414.34	0.003299	5.13	127.66	63.56	0.57			5.13	5.23
68.25	655.0	5408.69	5413.93	5412.71	5414.29	0.002403	4.80	136.42	62.24	0.50			4.80	5.24
68.13	655.0	5408.63	5414.04	5412.08	5414.22	0.001037	3.41	192.02	58.55	0.33			3.41	5.41
67.99	655.0	5408.63	5414.00	5412.21	5414.20	0.001364	3.60	181.86	63.54	0.38			3.60	5.37
67.89*	655.0	5408.63	5413.85	5412.37	5414.17	0.001974	4.56	143.50	46.04	0.46			4.56	5.22
67.79	655.0	5408.63	5413.35	5412.61	5414.10	0.004799	6.94	94.35	29.95	0.69			6.94	4.72
67.65	655.0	5408.40	5412.87	5412.63	5413.97	0.008092	8.43	77.68	27.47	0.88			8.43	4.47
67.4	655.0	5408.12	5413.01	5412.36	5413.67	0.004987	6.52	100.52	37.01	0.70			6.52	4.89
67.2*	655.0	5407.92	5413.00	5412.20	5413.55	0.003969	5.96	109.94	39.88	0.63			5.96	5.08
67	655.0	5407.73	5412.97	5412.03	5413.46	0.003468	5.62	116.61	41.94	0.59			5.62	5.24
66.75*	655.0	5407.68	5412.87	5411.91	5413.37	0.003450	5.68	115.32	40.80	0.60			5.68	5.19
66.5	655.0	5407.63	5412.75	5411.83	5413.29	0.003690	5.86	111.73	39.60	0.62			5.86	5.12
66.255*	655.0	5407.58	5412.53	5411.84	5413.19	0.004671	6.50	100.71	36.16	0.69			6.50	4.95
66.01	655.0	5407.52	5412.13	5411.76	5413.02	0.007034	7.56	86.66	32.30	0.81			7.56	4.61
65.84*	655.0	5407.39	5411.89	5411.70	5412.91	0.008401	8.12	80.65	31.84	0.90			8.12	4.49
65.67*	655.0	5407.25	5411.52	5411.52	5412.71	0.010221	8.76	74.76	30.87	0.99			8.76	4.27
65.5	655.0	5407.12	5410.92	5411.21	5412.48	0.015217	10.03	65.28	29.76	1.19			10.03	3.80
65.25*	655.0	5406.85	5411.38	5411.00	5412.18	0.006412	7.14	91.68	36.35	0.79			7.14	4.53
65	655.0	5406.58	5411.11	5410.94	5411.98	0.008848	7.51	87.22	40.85	0.91			7.51	4.53
64.8*	655.0	5406.58	5410.96	5410.74	5411.80	0.008042	7.37	88.88	40.29	0.87			7.37	4.38
64.6*	655.0	5406.58	5410.81	5410.53	5411.65	0.007478	7.34	89.21	38.55	0.85			7.34	4.23
64.4	655.0	5406.58	5410.67	5410.38	5411.52	0.007533	7.41	88.43	37.79	0.85			7.41	4.08
64.175*	655.0	5406.38	5410.82	5410.08	5411.27	0.003935	5.36	122.11	52.47	0.62			5.36	4.44
63.95	655.0	5406.17	5410.91	5409.79	5411.14	0.002028	3.91	167.35	69.81	0.45			3.91	4.74
63.7633*	655.0	5405.99	5410.82	5409.78	5411.09	0.002444	4.23	154.98	66.84	0.49			4.23	4.82
63.5766*	655.0	5405.81	5410.71	5409.76	5411.03	0.002860	4.56	143.55	62.39	0.53			4.56	4.90
63.39	655.0	5405.63	5410.59	5409.72	5410.96	0.003246	4.87	134.39	58.25	0.57			4.87	4.96
63.2066*	655.0	5405.46	5410.58	5409.49	5410.90	0.002508	4.50	145.48	58.45	0.50			4.50	5.12
63.0233*	655.0	5405.30	5410.58	5409.15	5410.84	0.001837	4.11	159.31	57.87	0.44			4.11	5.28
62.84	655.0	5405.13	5410.58	5408.78	5410.80	0.001323	3.78	173.44	55.45	0.38			3.78	5.45
62.6	655.0	5405.13	5410.58	5408.51	5410.76	0.000983	3.34	196.02	60.82	0.33		0.07	3.34	5.45
62.475*	655.0	5405.13	5410.46	5408.93	5410.73	0.001674	4.19	156.22	51.87	0.42		0.18	4.19	5.33
62.35	655.0	5405.13	5410.13	5409.17	5410.67	0.003722	5.88	111.31	38.76	0.61			5.88	5.00
62.175*	655.0	5405.10	5410.07	5409.26	5410.60	0.003912	5.81	112.76	43.17	0.63		0.23	5.81	4.97
62	655.0	5405.08	5410.00	5409.27	5410.52	0.004231	5.83	112.47	46.98	0.65		0.39	5.82	4.91
61.75*	655.0	5405.03	5409.64	5409.25	5410.37	0.006350	6.85	95.61	40.56	0.79			6.85	4.61
61.5	655.0	5404.98	5409.47	5409.05	5410.23	0.006318	7.03	93.19	37.58	0.79			7.03	4.48
61.25*	655.0	5404.82	5409.42	5408.77	5410.03	0.005044	6.28	104.35	42.66	0.71			6.28	4.60
61	655.0	5404.66	5409.48	5408.44	5409.87	0.002803	4.99	133.82	58.32	0.54	0.83		4.89	4.82
60.75*	655.0	5404.53	5409.44	5408.20	5409.79	0.002238	4.75	140.24	59.87	0.49	0.60	0.48	4.67	4.91
60.5	655.0	5404.39	5409.39	5407.98	5409.73	0.002012	4.70	145.71	58.56	0.47	0.40	1.13	4.50	5.00
60.25*	655.0	5404.26	5409.20	5408.10	5409.66	0.003097	5.44	120.53	42.79	0.57	0.16		5.43	4.94
60	655.0	5404.13	5408.85	5408.20	5409.54	0.005096	6.66	98.37	36.72	0.72			6.66	4.72
59.75*	655.0	5404.00	5408.78	5408.01	5409.38	0.004543	6.21	105.45	40.15	0.68			6.21	4.78
59.5	655.0	5403.88	5408.65	5407.96	5409.27	0.005038	6.31	103.88	42.15	0.70		0.39	6.31	4.77
59.25*	655.0	5403.84	5408.52	5407.89	5409.14	0.004942	6.32	103.86	42.77	0.70		0.58	6.31	4.68
59	655.0	5403.80	5408.43	5407.77	5409.01	0.004547	6.13	107.48	45.56	0.67		0.74	6.09	4.63
58.82*	655.0	5403.67	5408.36	5407.60	5408.92	0.004170	6.00	109.56	52.13	0.65		0.62	5.98	4.69
58.64*	655.0	5403.54	5408.27	5407.45	5408.83	0.004081	5.97	109.88	57.59	0.64		0.48	5.96	4.73
58.46	655.0	5403.41	5408.17	5407.35	5408.74	0.004237	6.03	108.73	69.12	0.65		0.33	6.02	4.76
58.23*	655.0	5403.30	5408.07	5407.25	5408.64	0.004321	6.05	108.32	70.60	0.66	0.05	0.25	6.05	4.77
58	655.0	5403.19	5407.94	5407.20	5408.54	0.004490	6.20	107.00	82.75	0.67	0.51	0.07	6.12	4.75
57.8825*	655.0	5403.17	5408.12	5407.13	5408.41	0.002227	4.72	204.77	161.98	0.48	1.26	0.35	3.20	4.95
57.765*	655.0	5403.16	5408.16	5407.06	5408.35	0.001565	4.10	247.21	162.18	0.41	1.34	0.35	2.65	4.99
57.6475*	655.0	5403.14	5408.18	5406.95	5408.32	0.001167	3.62	287.50	167.63	0.35	1.34	0.33	2.28	5.03

Profile Output Table - No Name Arroyo Undisturbed Channel 25yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.53	655.0	5403.12	5408.19	5406.96	5408.29	0.000890	3.22	326.73	169.86	0.31	1.32	0.31	2.00	5.07
57.38	655.0	5403.07	5408.06	5406.54	5408.27	0.001300	4.45	265.24	161.76	0.39	1.30	1.80	2.47	4.99
57.23	655.0	5403.06	5407.90	5406.43	5408.23	0.001717	4.69	153.76	159.11	0.44	0.51	1.61	4.26	4.84
57	655.0	5403.03	5407.79	5406.82	5408.19	0.002907	5.29	170.34	154.54	0.55	1.15	0.40	3.85	4.76
56.75*	655.0	5402.90	5407.69	5406.77	5408.10	0.002752	5.40	174.66	159.07	0.54	1.17	0.75	3.75	4.79
56.5	655.0	5402.77	5407.67	5406.69	5408.00	0.002174	5.11	202.01	160.89	0.49	1.30	0.85	3.24	4.90
56.375*	655.0	5402.67	5406.72	5406.69	5407.87	0.008970	8.64	77.98	102.44	0.95	0.96	1.28	8.40	4.05
56.25*	655.0	5402.58	5407.02	5407.02	5407.62	0.004364	6.67	148.81	149.67	0.68	1.43	1.30	4.40	4.44
56.125*	655.0	5402.48	5406.64	5406.89	5407.56	0.007124	8.03	115.82	140.58	0.85	1.41	1.68	5.66	4.16
56	655.0	5402.38	5406.85	5406.80	5407.35	0.003901	6.40	174.21	171.80	0.64	1.54	1.55	3.76	4.47
55.875*	655.0	5402.38	5406.81	5406.70	5407.25	0.003509	6.12	187.82	174.76	0.61	1.59	1.48	3.49	4.43
55.75*	655.0	5402.38	5406.80	5406.60	5407.17	0.002990	5.72	207.30	181.00	0.56	1.60	1.38	3.16	4.42
55.625*	655.0	5402.38	5406.80	5406.49	5407.10	0.002535	5.33	229.27	190.51	0.52	1.58	1.27	2.86	4.42
55.5	655.0	5402.38	5406.81	5406.53	5407.05	0.002130	4.93	253.94	200.74	0.48	1.54	1.20	2.58	4.43
55.375*	655.0	5402.38	5406.82	5406.21	5407.00	0.001617	4.32	283.39	208.93	0.42	1.41	1.03	2.31	4.44
55.25*	655.0	5402.38	5406.82	5406.04	5406.97	0.001260	3.83	312.72	215.31	0.37	1.32	0.90	2.09	4.44
55.125*	655.0	5402.38	5406.83	5405.90	5406.94	0.001005	3.42	342.12	220.56	0.33	1.24	0.81	1.91	4.45
55	655.0	5402.38	5405.77	5405.77	5406.82	0.009894	8.25	80.51	175.38	0.98	0.83	1.40	8.14	3.38
54.875*	655.0	5402.38	5405.76	5405.76	5406.83	0.010093	8.32	79.96	184.44	0.99	1.01	1.14	8.19	3.38
54.75*	655.0	5402.38	5405.78	5405.74	5406.20	0.005226	6.02	179.68	194.18	0.71	1.78	0.63	3.65	3.40
54.625*	655.0	5402.37	5405.72	5405.68	5406.12	0.005238	5.94	183.52	192.30	0.71	1.86	0.28	3.57	3.35
54.5	655.0	5402.37	5405.66	5405.59	5406.04	0.005216	5.86	187.47	190.87	0.70	1.92		3.49	3.29
54.25*	655.0	5402.29	5405.46	5405.40	5405.87	0.005580	6.17	181.98	189.29	0.73	2.02	0.58	3.60	3.17
54	655.0	5402.20	5405.20	5405.20	5405.68	0.006961	6.79	169.44	180.24	0.81	2.28	1.21	3.87	3.00
53.8233*	655.0	5402.10	5404.77	5405.01	5405.52	0.013344	8.23	134.00	173.18	1.09	2.66	1.34	4.89	2.67
53.6466*	655.0	5402.01	5404.85	5404.80	5405.20	0.006525	5.97	191.22	207.56	0.77	2.23	1.57	3.43	2.84
53.47	655.0	5401.91	5404.87	5404.57	5405.06	0.003906	4.66	244.46	235.67	0.60	1.93	1.56	2.68	2.95
Max							11.46	Avg						
Min							2.80							
Avg							6.05							

The undisturbed channel reaches following outside of the reconstructed channel reaches were not included in determining the maximum, minimum, and average velocities. The reconstructed reaches are from Station 81.50 to 72.23 and from Station 71.00 to 67.00.

Profile Output Table - No Name Arroyo Undisturbed Channel 100yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92.00	1011.0	5430.37	5438.42	5432.89	5438.47	0.000109	1.73	738.65	252.23	0.12	0.34	0.40	1.37	8.05
91.8925*	1011.0	5430.22	5438.40	5433.28	5438.46	0.000168	2.08	626.05	245.25	0.15	0.42	0.44	1.61	8.18
91.785*	1011.0	5430.07	5438.36	5433.75	5438.46	0.000277	2.57	510.47	233.82	0.19	0.54	0.48	1.98	8.29
91.6775*	1011.0	5429.92	5438.28	5434.29	5438.45	0.000515	3.33	389.42	208.93	0.25	0.73	0.52	2.60	8.36
91.57	1011.0	5429.77	5438.08	5435.02	5438.42	0.001213	4.76	233.33	155.51	0.37	1.06		4.33	8.31
91.465*	1011.0	5429.59	5438.03	5435.47	5438.40	0.001418	5.10	269.41	199.61	0.40	1.10	0.75	3.75	8.44
91.36*	1011.0	5429.42	5438.01	5435.90	5438.39	0.001539	5.34	308.97	248.60	0.42	1.00	1.01	3.27	8.59
91.255*	1011.0	5429.25	5438.05	5436.28	5438.35	0.001363	5.11	383.49	284.83	0.39	1.20	1.13	2.64	8.80
91.15	1011.0	5429.07	5436.64	5436.64	5438.21	0.007834	10.33	111.17	86.93	0.89	2.88		9.09	7.56
91.0533*	1011.0	5428.81	5434.58	5435.73	5437.94	0.025814	14.71	68.73	32.68	1.56			14.71	5.77
90.9566*	1011.0	5428.55	5433.73	5435.00	5437.61	0.035796	15.80	63.97	34.38	1.81			15.80	5.18
90.86	1011.0	5428.29	5433.17	5434.48	5437.19	0.043261	16.09	62.83	51.65	1.97			16.09	4.88
90.60	1011.0	5427.43	5432.62	5433.78	5436.14	0.027290	15.07	67.08	46.80	1.61			15.07	5.18
90.45*	1011.0	5426.88	5431.43	5432.77	5435.62	0.036125	16.42	61.59	44.15	1.84			16.42	4.55
90.30	1011.0	5426.33	5430.31	5431.82	5435.01	0.043507	17.40	58.10	42.85	2.01			17.40	3.97
90.2*	1011.0	5426.29	5429.37	5430.84	5434.46	0.061367	18.10	55.87	30.24	2.35			18.10	3.08
90.1*	1011.0	5426.25	5428.70	5430.10	5433.77	0.077244	18.07	55.96	36.58	2.57			18.07	2.45
90.00	1011.0	5426.21	5428.19	5429.45	5432.82	0.083781	17.27	58.55	43.75	2.63			17.27	1.98
89.875*	1011.0	5425.98	5428.29	5429.33	5431.70	0.049590	14.82	68.21	43.25	2.08			14.82	2.31
89.75*	1011.0	5425.75	5428.43	5429.21	5430.97	0.030314	12.81	78.95	43.02	1.67			12.81	2.68
89.625*	1011.0	5425.52	5428.66	5429.17	5430.51	0.018126	10.92	92.62	43.40	1.32			10.92	3.14
89.50	1011.0	5425.29	5429.34	5429.07	5430.34	0.007317	8.05	125.58	46.56	0.86			8.05	4.04
89.4166*	1011.0	5425.08	5429.40	5428.87	5430.24	0.005571	7.34	137.81	47.84	0.76			7.34	4.32
89.3333*	1011.0	5424.87	5429.44	5428.66	5430.16	0.004331	6.82	148.33	47.39	0.68			6.82	4.57
89.25	1011.0	5424.66	5429.46	5428.42	5430.12	0.003546	6.49	155.71	45.66	0.62			6.49	4.80
89.125*	1011.0	5424.40	5429.65	5428.01	5429.99	0.001779	4.64	218.09	64.78	0.44			4.64	5.25
89.00	1011.0	5424.13	5429.71	5427.78	5429.93	0.001291	3.75	269.76	88.26	0.38	0.11		3.75	5.58
88.8266*	1011.0	5423.95	5429.72	5427.88	5429.90	0.001127	3.46	291.82	96.06	0.35			3.46	5.76
88.6533*	1011.0	5423.77	5429.71	5427.98	5429.88	0.001037	3.26	310.29	105.22	0.33			3.26	5.94
88.48	1011.0	5423.59	5429.70	5428.09	5429.85	0.001004	3.12	324.21	114.43	0.33			3.12	6.11
88.2400*	1011.0	5423.60	5429.58	5427.77	5429.82	0.001330	3.96	255.40	77.52	0.38			3.96	5.98
88.00	1011.0	5423.60	5429.06	5427.89	5429.73	0.003334	6.56	154.14	42.09	0.60			6.56	5.46
87.875*	1011.0	5423.66	5428.96	5427.97	5429.70	0.003828	6.87	147.15	41.80	0.65			6.87	5.30
87.75*	1011.0	5423.72	5428.83	5428.04	5429.65	0.004499	7.25	139.43	41.42	0.70			7.25	5.11
87.625*	1011.0	5423.78	5428.70	5428.08	5429.61	0.005286	7.65	132.14	40.97	0.75			7.65	4.92
87.50	1011.0	5423.84	5428.09	5428.09	5429.48	0.009858	9.48	106.69	38.47	1.00			9.48	4.24
87.3333*	1011.0	5423.84	5427.59	5427.85	5429.29	0.013330	10.46	96.67	37.90	1.15			10.46	3.75
87.1666*	1011.0	5423.84	5427.76	5427.69	5429.04	0.008890	9.08	111.31	39.65	0.96			9.08	3.92
87.00	1011.0	5423.84	5427.59	5427.48	5428.85	0.008770	9.00	112.29	39.95	0.95			9.00	3.75
86.74	1011.0	5423.82	5427.54	5427.26	5428.56	0.007241	8.10	124.79	45.18	0.86			8.10	3.72
86.62*	1011.0	5423.73	5427.82	5427.07	5428.34	0.003965	5.78	174.85	67.67	0.63			5.78	4.09
86.50	1011.0	5423.64	5427.88	5427.11	5428.24	0.003372	4.82	209.71	94.72	0.57			4.82	4.24
86.3849*	1011.0	5423.55	5427.82	5426.68	5428.20	0.002536	4.92	205.32	72.00	0.51			4.92	4.27
86.27	1011.0	5423.47	5427.53	5426.53	5428.14	0.003490	6.25	161.74	69.12	0.61			6.25	4.06
86.1349*	1011.0	5423.31	5427.36	5426.58	5428.08	0.004404	6.81	148.47	49.66	0.68			6.81	4.05
86.00	1011.0	5423.15	5426.99	5426.64	5427.98	0.006877	7.96	127.03	44.97	0.83			7.96	3.84
85.8*	1011.0	5422.90	5426.99	5426.42	5427.81	0.005217	7.25	139.41	46.35	0.74			7.25	4.09
85.60	1011.0	5422.64	5426.99	5426.16	5427.67	0.004079	6.64	152.30	47.99	0.66			6.64	4.35
85.35*	1011.0	5422.58	5426.87	5426.09	5427.57	0.004191	6.72	150.48	47.70	0.67			6.72	4.29
85.1*	1011.0	5422.52	5426.75	5425.98	5427.47	0.004358	6.83	148.06	47.18	0.68			6.83	4.23
84.85	1011.0	5422.46	5426.62	5425.87	5427.37	0.004475	6.92	146.20	46.56	0.69			6.92	4.16
84.6833*	1011.0	5422.36	5426.64	5425.81	5427.24	0.003838	6.22	162.55	54.93	0.64			6.22	4.28
84.5166*	1011.0	5422.27	5426.64	5425.82	5427.14	0.003558	5.71	177.15	64.81	0.61			5.71	4.37
84.35	1011.0	5422.17	5426.61	5425.74	5427.06	0.003366	5.40	187.21	90.20	0.59			5.40	4.44
84.2333*	1011.0	5422.17	5426.71	5425.34	5426.96	0.001636	4.01	252.11	87.75	0.42			4.01	4.54
84.1166*	1011.0	5422.17	5426.75	5425.17	5426.92	0.001127	3.34	302.30	104.73	0.35			3.34	4.58
84.00	1011.0	5422.17	5426.76	5424.96	5426.90	0.000932	2.97	340.13	121.83	0.31			2.97	4.59
83.75	1011.0	5422.39	5426.69	5425.04	5426.87	0.001108	3.45	292.74	195.39	0.35			3.45	4.30
83.625*	1011.0	5422.08	5426.75	5424.29	5426.83	0.000403	2.25	449.79	171.15	0.21			2.25	4.67
83.50	1011.0	5421.77	5426.78	5423.63	5426.82	0.000151	1.52	667.23	168.50	0.13			1.52	5.01
83.3849*	1011.0	5421.42	5426.72	5423.92	5426.81	0.000382	2.38	423.97	108.13	0.21			2.38	5.30
83.27	1011.0	5421.08	5426.23	5424.83	5426.76	0.002544	5.81	173.98	47.00	0.53			5.81	5.15
83.00	1011.0	5420.96	5426.19	5424.74	5426.68	0.002449	5.62	179.98	49.64	0.52			5.62	5.23
82.8825*	1011.0	5420.96	5426.30	5424.36	5426.58	0.001314	4.25	237.62	63.41	0.39			4.25	5.34
82.765*	1011.0	5420.96	5426.35	5424.13	5426.54	0.000880	3.51	288.39	76.67	0.32			3.51	5.39
82.6475*	1011.0	5420.97	5426.38	5424.01	5426.52	0.000664	3.03	333.49	89.63	0.28			3.03	5.40
82.53	1011.0	5420.97	5426.39	5423.82	5426.50	0.000542	2.71	373.44	102.30	0.25			2.71	5.42
82.3999*	1011.0	5420.95	5426.31	5423.88	5426.49	0.000776	3.39	298.66	75.96	0.30			3.39	5.36
82.27	1011.0	5420.93	5426.02	5424.25	5426.45	0.001930	5.22	193.62	49.07	0.46			5.22	5.09
82.1349*	1011.0	5421.01	5425.84	5424.55	5426.40	0.002828	6.03	167.64	45.83	0.56			6.03	4.83
82.00	1011.0	5421.09	5425.44	5424.82	5426.32	0.005199	7.51	134.62	42.01	0.74			7.51	4.35

Profile Output Table - No Name Arroyo Undisturbed Channel 100yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	1011.0	5421.00	5425.36	5424.80	5426.24	0.005388	7.52	134.47	43.41	0.75			7.52	4.36
81.75*	1011.0	5420.92	5425.29	5424.75	5426.17	0.005508	7.52	134.44	44.29	0.76			7.52	4.37
81.625*	1011.0	5420.83	5425.21	5424.71	5426.09	0.005657	7.54	134.14	44.93	0.77			7.54	4.38
81.50	1011.0	5420.74	5425.13	5424.66	5426.02	0.005869	7.58	133.42	45.41	0.78			7.58	4.39
81.25	1011.0	5420.44	5425.23	5424.20	5425.81	0.003346	6.10	165.78	133.06	0.60			6.10	4.79
81.125*	1011.0	5420.06	5425.43	5423.63	5425.69	0.001336	4.10	246.61	91.56	0.39			4.10	5.37
81.00	1011.0	5419.68	5425.49	5423.24	5425.64	0.000729	3.12	324.34	89.81	0.29			3.12	5.81
80.875*	1011.0	5419.60	5425.36	5423.44	5425.62	0.001301	4.11	245.85	69.07	0.38			4.11	5.76
80.75	1011.0	5419.53	5424.90	5423.92	5425.56	0.003689	6.52	155.13	47.02	0.63			6.52	5.37
80.50	1011.0	5419.47	5424.60	5423.93	5425.43	0.005193	7.31	138.32	45.73	0.74			7.31	5.13
80.25*	1011.0	5419.47	5424.49	5423.76	5425.30	0.004777	7.22	140.11	44.19	0.71			7.22	5.02
80.00	1011.0	5419.47	5424.39	5423.56	5425.18	0.004388	7.12	142.04	42.56	0.69			7.12	4.92
79.775*	1011.0	5419.29	5424.44	5423.22	5425.04	0.003097	6.22	162.59	47.30	0.58			6.22	5.15
79.55	1011.0	5419.11	5424.49	5422.91	5424.94	0.002153	5.38	194.39	68.96	0.49	1.07		5.20	5.38
79.465*	1011.0	5419.12	5424.41	5422.98	5424.92	0.002510	5.71	176.99	57.17	0.53			5.71	5.29
79.38*	1011.0	5419.13	5424.33	5423.06	5424.89	0.002873	6.01	168.27	53.17	0.56			6.01	5.20
79.295*	1011.0	5419.14	5424.25	5423.13	5424.87	0.003324	6.33	159.67	49.64	0.60			6.33	5.11
79.21*	1011.0	5419.15	5424.14	5423.23	5424.84	0.003934	6.71	150.59	59.16	0.65			6.71	4.99
79.125*	1011.0	5419.16	5424.00	5423.29	5424.81	0.004884	7.22	140.02	70.95	0.72			7.22	4.84
79.04	1011.0	5419.17	5423.39	5423.39	5424.71	0.010006	9.24	109.40	60.03	1.01			9.24	4.21
78.77	1011.0	5419.02	5422.59	5422.98	5424.30	0.015679	10.50	96.32	64.46	1.23			10.50	3.57
78.50	1011.0	5418.74	5423.31	5422.45	5423.89	0.003958	6.13	164.95	108.92	0.65			6.13	4.57
78.375*	1011.0	5418.54	5423.19	5422.38	5423.82	0.004104	6.34	159.35	55.33	0.66			6.34	4.65
78.25*	1011.0	5418.35	5423.04	5422.33	5423.74	0.004509	6.70	150.95	51.61	0.69			6.70	4.69
78.125*	1011.0	5418.15	5422.86	5422.26	5423.66	0.005255	7.21	140.21	47.79	0.74			7.21	4.71
78.00	1011.0	5417.95	5422.24	5422.24	5423.54	0.010058	9.15	110.46	42.58	1.00			9.15	4.29
77.7966*	1011.0	5417.52	5422.35	5421.82	5423.23	0.005644	7.52	134.41	45.45	0.77			7.52	4.83
77.5933*	1011.0	5417.08	5422.33	5421.61	5423.10	0.004890	7.04	143.69	48.06	0.72			7.04	5.25
77.39	1011.0	5416.65	5421.56	5421.56	5422.89	0.009756	9.26	109.15	39.92	0.99			9.26	4.91
77.2666*	1011.0	5416.28	5420.59	5421.16	5422.67	0.017475	11.57	87.39	35.68	1.30			11.57	4.31
77.1433*	1011.0	5415.91	5420.05	5420.73	5422.43	0.021219	12.37	81.75	35.10	1.43			12.37	4.14
77.02*	1011.0	5415.54	5419.65	5420.38	5422.14	0.022307	12.65	79.90	34.47	1.46			12.65	4.11
76.8966*	1011.0	5415.18	5421.14	5420.02	5421.89	0.003681	6.91	146.22	39.58	0.63			6.91	5.96
76.7733*	1011.0	5414.81	5421.16	5419.75	5421.83	0.002991	6.57	153.99	37.99	0.57			6.57	6.35
76.65	1011.0	5414.44	5421.15	5419.45	5421.79	0.002664	6.41	157.77	36.15	0.54			6.41	6.71
76.4666*	1011.0	5414.50	5421.17	5419.34	5421.70	0.002193	5.85	172.84	40.08	0.50			5.85	6.67
76.2833*	1011.0	5414.55	5421.19	5419.21	5421.64	0.001839	5.37	188.14	48.91	0.46			5.37	6.64
76.10	1011.0	5414.61	5421.20	5419.10	5421.58	0.001574	4.97	203.37	58.78	0.43			4.97	6.59
75.984*	1011.0	5414.62	5421.12	5419.27	5421.56	0.001883	5.30	190.68	54.95	0.46			5.30	6.50
75.868*	1011.0	5414.64	5421.03	5419.41	5421.53	0.002312	5.70	177.37	48.11	0.51			5.70	6.39
75.752*	1011.0	5414.65	5420.90	5419.55	5421.50	0.002951	6.21	162.84	44.40	0.57			6.21	6.25
75.6359*	1011.0	5414.67	5420.69	5419.74	5421.45	0.004099	6.96	145.17	42.58	0.66			6.96	6.02
75.52	1011.0	5414.68	5419.91	5419.91	5421.33	0.009859	9.55	105.82	37.20	1.00			9.55	5.23
75.3466*	1011.0	5414.46	5418.95	5419.54	5421.03	0.020626	11.57	87.38	40.75	1.39			11.57	4.49
75.1733*	1011.0	5414.24	5418.41	5419.09	5420.61	0.027222	11.91	84.90	46.99	1.56			11.91	4.17
75.00	1011.0	5414.02	5419.74	5418.59	5420.17	0.002693	5.25	192.42	88.91	0.53			5.25	5.72
74.8*	1011.0	5413.78	5419.75	5418.35	5420.10	0.002112	4.79	211.10	73.88	0.48			4.79	5.97
74.6*	1011.0	5413.54	5419.75	5418.12	5420.05	0.001664	4.37	231.45	70.87	0.43			4.37	6.21
74.40	1011.0	5413.30	5419.76	5417.87	5420.00	0.001317	3.99	253.31	85.50	0.38			3.99	6.46
74.2*	1011.0	5413.27	5419.72	5417.88	5419.98	0.001333	4.07	248.29	136.30	0.39			4.07	6.45
74.00	1011.0	5413.25	5419.66	5417.94	5419.95	0.001582	4.34	233.05	147.54	0.42			4.34	6.41
73.9166*	1011.0	5413.20	5419.58	5417.95	5419.93	0.001820	4.77	212.16	136.76	0.45			4.77	6.38
73.8333*	1011.0	5413.16	5419.45	5418.00	5419.90	0.002315	5.42	186.55	105.93	0.50			5.42	6.29
73.75	1011.0	5413.11	5419.20	5418.12	5419.86	0.003481	6.53	154.85	89.85	0.61			6.53	6.09
73.50	1011.0	5412.90	5418.73	5418.05	5419.71	0.005575	7.97	126.92	76.96	0.75			7.97	5.83
73.375*	1011.0	5412.83	5418.93	5417.76	5419.55	0.003281	6.31	160.33	81.53	0.59			6.31	6.10
73.25	1011.0	5412.76	5419.04	5417.45	5419.46	0.002050	5.17	196.23	54.91	0.47		0.67	5.15	6.28
73.00	1011.0	5412.42	5418.77	5417.52	5419.37	0.002978	6.24	163.80	48.92	0.57		0.93	6.17	6.35
72.77	1011.0	5412.16	5418.78	5417.31	5419.27	0.002441	5.63	179.49	53.63	0.51			5.63	6.62
72.615*	1011.0	5412.04	5418.58	5417.24	5419.23	0.003101	6.46	156.54	39.67	0.57			6.46	6.54
72.46	1011.0	5411.92	5418.13	5417.26	5419.13	0.004879	8.02	126.05	45.40	0.71			8.02	6.21
72.23	1011.0	5411.71	5418.43	5417.06	5418.88	0.002513	5.42	186.42	53.52	0.51			5.42	6.72
72.1150*	1011.0	5411.76	5418.23	5417.21	5418.83	0.003514	6.25	161.87	49.47	0.61			6.25	6.47
72.00	1011.0	5411.82	5417.18	5417.18	5418.69	0.010206	9.85	102.59	34.70	1.01			9.85	5.36
71.78	1011.0	5411.71	5416.20	5416.83	5418.33	0.027560	11.72	86.29	49.24	1.56			11.72	4.49
71.6866*	1011.0	5411.68	5416.05	5416.62	5418.01	0.025745	11.25	89.85	51.92	1.51			11.25	4.36
71.5933*	1011.0	5411.66	5415.84	5416.43	5417.81	0.027169	11.26	89.78	53.82	1.54			11.26	4.18
71.50	1011.0	5411.63	5416.73	5416.25	5417.43	0.005554	6.68	151.24	59.11	0.74			6.68	5.10
71.375*	1011.0	5411.50	5416.58	5416.20	5417.36	0.006291	7.10	142.44	56.26	0.79			7.10	5.08
71.25*	1011.0	5411.37	5416.45	5416.08	5417.27	0.006468	7.31	138.34	53.17	0.80			7.31	5.08
71.125*	1011.0	5411.23	5416.34	5415.90	5417.17	0.006092	7.31	138.21	49.82	0.77			7.31	5.11

Profile Output Table - No Name Arroyo Undisturbed Channel 100yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71.00	1011.0	5411.10	5416.30	5415.63	5417.07	0.005131	7.06	143.27	46.50	0.71			7.06	5.20
70.875*	1011.0	5411.04	5416.23	5415.74	5416.99	0.005662	7.00	144.44	54.01	0.75			7.00	5.19
70.75	1011.0	5410.97	5415.75	5415.75	5416.85	0.010198	8.41	120.22	53.39	0.99			8.41	4.78
70.65*	1011.0	5410.80	5415.00	5415.47	5416.70	0.020959	10.46	96.64	53.61	1.37			10.46	4.20
70.55*	1011.0	5410.62	5414.55	5415.08	5416.45	0.026413	11.08	91.22	55.24	1.52			11.08	3.93
70.45*	1011.0	5410.45	5415.80	5414.72	5416.24	0.002960	5.30	190.87	66.75	0.55			5.30	5.35
70.35	1011.0	5410.28	5415.87	5414.30	5416.18	0.001852	4.46	226.55	71.43	0.44			4.46	5.59
70.175*	1011.0	5410.25	5415.77	5414.36	5416.14	0.002187	4.88	207.34	65.58	0.48			4.88	5.52
70.00	1011.0	5410.21	5415.73	5414.22	5416.10	0.001973	4.90	206.35	58.52	0.46			4.90	5.52
69.75*	1011.0	5409.81	5415.69	5413.95	5416.05	0.001779	4.80	210.79	58.59	0.45			4.80	5.88
69.50	1011.0	5409.42	5415.61	5414.08	5416.00	0.002083	4.98	203.02	59.06	0.47			4.98	6.19
69.3333*	1011.0	5409.23	5415.54	5414.04	5415.96	0.002153	5.21	193.96	53.92	0.48			5.21	6.31
69.1666*	1011.0	5409.05	5415.42	5414.01	5415.91	0.002424	5.60	180.38	53.99	0.51			5.60	6.37
69.00	1011.0	5408.86	5415.24	5414.01	5415.85	0.003090	6.25	161.66	52.46	0.57			6.25	6.38
68.75*	1011.0	5408.79	5415.29	5413.86	5415.72	0.002339	5.29	191.22	71.11	0.50			5.29	6.50
68.50	1011.0	5408.71	5415.24	5413.75	5415.65	0.002537	5.12	197.27	82.83	0.52			5.12	6.53
68.375*	1011.0	5408.70	5415.22	5413.72	5415.62	0.002264	5.06	199.63	81.68	0.50	0.04		5.06	6.52
68.25	1011.0	5408.69	5415.26	5413.44	5415.56	0.001457	4.59	247.15	75.10	0.41	1.84		4.09	6.57
68.13	1011.0	5408.63	5415.30	5412.68	5415.52	0.000915	3.73	270.84	67.33	0.32			3.73	6.67
67.99	1011.0	5408.63	5415.28	5413.01	5415.50	0.001013	3.81	265.62	67.62	0.34			3.81	6.65
67.89*	1011.0	5408.63	5415.09	5413.12	5415.47	0.001677	4.96	203.78	50.53	0.44			4.96	6.46
67.79	1011.0	5408.63	5414.40	5413.44	5415.38	0.004799	7.96	127.01	32.31	0.71			7.96	5.77
67.65	1011.0	5408.40	5413.69	5413.57	5415.24	0.008920	9.99	101.23	29.48	0.95			9.99	5.29
67.40	1011.0	5408.12	5414.04	5413.18	5414.85	0.004482	7.19	140.52	40.69	0.68			7.19	5.92
67.2*	1011.0	5407.92	5414.06	5412.95	5414.73	0.003515	6.56	154.23	43.87	0.62			6.56	6.14
67.00	1011.0	5407.73	5414.05	5412.81	5414.64	0.003042	6.16	164.22	46.34	0.58			6.16	6.32
66.75*	1011.0	5407.68	5413.96	5412.73	5414.56	0.003094	6.23	162.38	45.88	0.58			6.23	6.28
66.50	1011.0	5407.63	5413.85	5412.65	5414.48	0.003347	6.38	158.58	45.92	0.60			6.38	6.22
66.255*	1011.0	5407.58	5413.57	5412.67	5414.37	0.004313	7.19	140.58	40.59	0.68			7.19	5.99
66.01	1011.0	5407.52	5413.02	5412.63	5414.19	0.007056	8.69	116.40	34.82	0.84			8.69	5.50
65.84*	1011.0	5407.39	5412.78	5412.56	5414.08	0.007998	9.15	110.48	34.63	0.90			9.15	5.39
65.67*	1011.0	5407.25	5412.37	5412.37	5413.88	0.009813	9.87	102.42	33.81	1.00			9.87	5.12
65.50	1011.0	5407.12	5411.72	5412.08	5413.67	0.014134	11.21	90.18	32.48	1.19			11.21	4.60
65.25*	1011.0	5406.85	5411.45	5411.79	5413.24	0.014179	10.76	93.94	36.49	1.18			10.76	4.60
65.00	1011.0	5406.58	5411.91	5411.69	5412.99	0.007793	8.34	121.17	43.62	0.88			8.34	5.33
64.8*	1011.0	5406.58	5411.79	5411.47	5412.82	0.007164	8.16	123.96	43.94	0.86			8.16	5.21
64.6*	1011.0	5406.58	5411.65	5411.31	5412.68	0.007105	8.16	123.91	43.84	0.86			8.16	5.06
64.40	1011.0	5406.58	5411.50	5411.22	5412.56	0.007266	8.26	122.39	43.12	0.86			8.26	4.92
64.175*	1011.0	5406.38	5411.77	5410.76	5412.28	0.003368	5.76	175.40	60.18	0.60			5.76	5.39
63.95	1011.0	5406.17	5411.90	5410.30	5412.16	0.001512	4.13	266.05	123.71	0.40		0.85	3.80	5.73
63.7633*	1011.0	5405.99	5411.80	5410.38	5412.11	0.001890	4.48	232.15	109.19	0.45		0.49	4.35	5.81
63.5766*	1011.0	5405.81	5411.71	5410.38	5412.06	0.002304	4.79	210.96	72.83	0.49		0.04	4.79	5.90
63.39	1011.0	5405.63	5411.60	5410.36	5412.01	0.002658	5.12	197.48	68.36	0.53			5.12	5.97
63.2066*	1011.0	5405.46	5411.59	5410.09	5411.95	0.002156	4.84	208.89	67.14	0.48			4.84	6.13
63.0233*	1011.0	5405.30	5411.58	5409.85	5411.90	0.001692	4.59	220.53	66.25	0.43		0.31	4.58	6.28
62.84	1011.0	5405.13	5411.57	5409.45	5411.87	0.001356	4.37	233.85	81.68	0.39		0.35	4.32	6.44
62.60	1011.0	5405.13	5411.59	5409.16	5411.81	0.000998	3.85	278.01	107.35	0.34	0.17	0.65	3.64	6.46
62.475*	1011.0	5405.13	5411.43	5409.62	5411.79	0.001594	4.83	223.06	91.53	0.43	0.37	0.84	4.53	6.30
62.35	1011.0	5405.13	5411.04	5410.05	5411.72	0.003474	6.71	165.08	76.24	0.61	0.43	1.40	6.12	5.91
62.175*	1011.0	5405.10	5411.00	5410.01	5411.65	0.003476	6.52	164.88	66.57	0.62			1.30	6.13
62.00	1011.0	5405.08	5410.94	5409.99	5411.57	0.003573	6.40	165.26	64.21	0.62			1.33	6.12
61.75*	1011.0	5405.03	5410.60	5410.02	5411.44	0.005067	7.39	140.58	54.46	0.74			1.30	7.19
61.50	1011.0	5404.98	5410.25	5409.85	5411.28	0.006346	8.15	125.48	46.32	0.82			1.08	8.06
61.25*	1011.0	5404.82	5410.30	5409.60	5411.06	0.004508	7.00	146.49	55.45	0.70	0.38	0.98	6.90	5.48
61.00	1011.0	5404.66	5410.43	5409.17	5410.89	0.002368	5.56	200.61	92.91	0.52	1.13	0.82	5.04	5.77
60.75*	1011.0	5404.53	5410.38	5408.93	5410.83	0.001999	5.40	209.48	94.98	0.48	0.90	1.28	4.83	5.85
60.50	1011.0	5404.39	5410.33	5408.77	5410.77	0.001906	5.43	210.70	93.82	0.47	0.73	1.62	4.80	5.94
60.25*	1011.0	5404.26	5410.08	5408.89	5410.70	0.003004	6.35	167.44	78.96	0.58	0.71	0.83	6.04	5.82
60.00	1011.0	5404.13	5409.54	5409.07	5410.55	0.006066	8.07	125.86	43.62	0.80	0.81		8.03	5.41
59.75*	1011.0	5404.00	5409.49	5408.86	5410.35	0.005278	7.45	136.21	48.42	0.75	0.66	0.15	7.42	5.49
59.50	1011.0	5403.88	5409.35	5408.80	5410.22	0.005659	7.49	136.68	53.41	0.77	0.48	1.25	7.40	5.47
59.25*	1011.0	5403.84	5409.19	5408.69	5410.08	0.005781	7.62	135.09	51.94	0.78		1.35	7.48	5.35
59.00	1011.0	5403.80	5409.07	5408.53	5409.93	0.005340	7.48	139.50	67.92	0.75		1.54	7.25	5.27
58.82*	1011.0	5403.67	5408.96	5408.36	5409.82	0.005286	7.47	138.61	119.28	0.75		1.42	7.29	5.29
58.64*	1011.0	5403.54	5409.08	5408.26	5409.66	0.003549	6.39	214.68	178.94	0.62	1.27	1.26	4.71	5.54
58.46	1011.0	5403.41	5408.37	5408.18	5409.53	0.008255	8.64	117.41	100.63	0.92		0.88	8.61	4.96
58.23*	1011.0	5403.30	5408.61	5408.12	5409.23	0.004195	6.72	215.21	178.89	0.67	1.55	0.97	4.70	5.31
58.00	1011.0	5403.19	5408.59	5408.35	5409.08	0.003387	6.23	246.89	182.29	0.61	1.68	0.91	4.09	5.40
57.8825*	1011.0	5403.17	5408.64	5408.14	5408.99	0.002394	5.45	294.33	183.26	0.51	1.74	0.78	3.43	5.47
57.765*	1011.0	5403.16	5408.67	5407.97	5408.93	0.001784	4.84	337.93	183.71	0.45	1.74	0.73	2.99	5.51
57.6475*	1011.0	5403.14	5408.70	5407.72	5408.89	0.001378	4.35	379.46	184.06	0.39	1.71	0.67	2.66	5.56

Profile Output Table - No Name Arroyo Undisturbed Channel 100yr-6hr
 HEC-RAS Plan: Premine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.53	1011.0	5403.12	5408.71	5407.50	5408.86	0.001097	3.93	419.29	184.59	0.35	1.68	0.62	2.41	5.59
57.38	1011.0	5403.07	5408.55	5407.09	5408.83	0.001654	5.42	349.96	181.01	0.45	1.73	2.23	2.89	5.48
57.23	1011.0	5403.06	5408.25	5407.17	5408.76	0.002553	6.09	231.77	169.03	0.54	1.13	2.15	4.36	5.19
57.00	1011.0	5403.03	5408.12	5408.00	5408.70	0.004091	6.73	220.84	159.37	0.66	1.87	0.87	4.58	5.09
56.75*	1011.0	5402.90	5407.95	5407.95	5408.62	0.004434	7.22	217.36	179.48	0.69	1.77	1.13	4.65	5.04
56.50	1011.0	5402.77	5407.70	5407.70	5408.46	0.004935	7.74	207.23	163.30	0.73	2.00	1.28	4.88	4.93
56.375*	1011.0	5402.67	5407.65	5407.65	5408.32	0.004436	7.46	226.95	177.56	0.70	2.00	1.40	4.45	4.98
56.25*	1011.0	5402.58	5407.28	5407.48	5408.24	0.006733	8.75	190.35	171.25	0.85	2.14	1.75	5.31	4.70
56.125*	1011.0	5402.48	5407.05	5407.36	5408.14	0.008035	9.36	180.53	171.52	0.93	2.25	2.07	5.60	4.57
56.00	1011.0	5402.38	5406.88	5407.22	5408.01	0.008764	9.66	179.51	172.87	0.97	2.38	2.36	5.63	4.50
55.875*	1011.0	5402.38	5406.88	5407.08	5407.81	0.007365	8.99	199.89	178.33	0.89	2.41	2.20	5.06	4.50
55.75*	1011.0	5402.38	5406.88	5406.99	5407.64	0.006191	8.37	221.62	185.97	0.82	2.40	2.02	4.56	4.50
55.625*	1011.0	5402.38	5406.88	5406.90	5407.50	0.005268	7.81	244.38	196.23	0.75	2.35	1.87	4.14	4.50
55.50	1011.0	5402.38	5406.55	5406.76	5407.44	0.008112	9.13	204.44	182.49	0.92	2.66	2.09	4.95	4.17
55.375*	1011.0	5402.38	5406.61	5406.65	5407.22	0.005529	7.67	242.16	197.99	0.76	2.37	1.77	4.17	4.23
55.25*	1011.0	5402.38	5406.32	5406.52	5407.11	0.007542	8.40	210.78	193.02	0.88	2.44	2.00	4.80	3.94
55.125*	1011.0	5402.38	5406.32	5406.38	5406.93	0.005928	7.43	235.83	201.40	0.78	2.31	1.79	4.29	3.94
55.00	1011.0	5402.38	5406.33	5406.22	5406.79	0.004636	6.58	263.64	208.85	0.69	2.19	1.62	3.83	3.95
54.875*	1011.0	5402.38	5406.29	5406.16	5406.72	0.004553	6.45	269.78	210.54	0.69	2.23	1.43	3.75	3.91
54.75*	1011.0	5402.38	5406.24	5406.10	5406.65	0.004495	6.34	275.39	213.39	0.68	2.26	1.23	3.67	3.86
54.625*	1011.0	5402.37	5406.14	5405.98	5406.56	0.004974	6.50	269.27	216.16	0.71	2.35	1.01	3.75	3.77
54.50	1011.0	5402.37	5406.08	5405.94	5406.48	0.004956	6.40	274.40	220.43	0.71	2.38	0.82	3.68	3.71
54.25*	1011.0	5402.29	5405.87	5405.77	5406.32	0.005550	6.88	264.89	221.21	0.75	2.47	1.30	3.82	3.58
54.00	1011.0	5402.20	5405.55	5405.55	5406.12	0.007591	7.82	237.85	210.55	0.87	2.82	1.80	4.25	3.35
53.8233*	1011.0	5402.10	5405.08	5405.30	5405.94	0.013808	9.32	191.07	196.72	1.14	3.33	2.12	5.29	2.98
53.6466*	1011.0	5402.01	5405.23	5405.07	5405.61	0.006175	6.57	274.78	234.92	0.78	2.63	2.01	3.68	3.22
53.47	1011.0	5401.91	5405.25	5404.86	5405.48	0.003903	5.27	339.27	263.95	0.62	2.26	1.91	2.98	3.33
						Max	12.65					Avg	6.59	
						Min	3.12							
						Avg	6.60							

Appendix 35.B

No Name Arroyo

HEC-RAS Analysis - Reconstructed Channel

Profile Output Table - No Name Arroyo Reconstructed Channel 2yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92	75.0	5430.37	5432.56	5431.00	5432.57	0.000098	0.72	104.00	57.42	0.09			0.72	2.19
91.8925*	75.0	5430.22	5432.56	5431.10	5432.57	0.000171	0.92	81.69	47.44	0.12			0.92	2.34
91.785*	75.0	5430.07	5432.54	5431.13	5432.57	0.000299	1.19	63.14	37.61	0.16			1.19	2.47
91.6775*	75.0	5429.92	5432.52	5431.18	5432.56	0.000492	1.55	48.36	27.50	0.21			1.55	2.60
91.57	75.0	5429.77	5432.48	5431.28	5432.55	0.000857	2.07	36.29	19.66	0.27			2.07	2.71
91.465*	75.0	5429.59	5432.43	5431.46	5432.54	0.001480	2.57	29.19	17.13	0.35			2.57	2.84
91.36*	75.0	5429.42	5432.35	5431.59	5432.51	0.002644	3.24	23.12	14.66	0.46			3.24	2.93
91.255*	75.0	5429.25	5432.18	5431.67	5432.46	0.005076	4.23	17.73	12.10	0.62			4.23	2.93
91.15	75.0	5429.07	5431.70	5431.70	5432.35	0.014355	6.44	11.65	8.85	0.99			6.44	2.63
91.0533*	75.0	5428.81	5430.91	5431.28	5432.06	0.032780	8.61	8.71	8.26	1.48			8.61	2.10
90.9566*	75.0	5428.55	5430.51	5430.90	5431.72	0.036796	8.83	8.50	8.62	1.57			8.83	1.96
90.86	75.0	5428.29	5430.17	5430.55	5431.35	0.037275	8.73	8.59	9.07	1.58			8.73	1.88
90.6	75.0	5427.43	5429.22	5429.59	5430.36	0.038414	8.57	8.75	9.82	1.60			8.57	1.79
90.45*	75.0	5426.88	5428.51	5428.92	5429.73	0.045026	8.86	8.47	10.33	1.72			8.86	1.63
90.3	75.0	5426.33	5427.77	5428.17	5428.97	0.055761	8.80	8.52	12.55	1.88			8.80	1.44
90.2*	75.0	5426.29	5427.53	5427.82	5428.37	0.043417	7.32	10.24	16.80	1.65			7.32	1.24
90.1*	75.0	5426.25	5427.31	5427.51	5427.91	0.034585	6.19	12.11	21.76	1.46			6.19	1.06
90	75.0	5426.21	5427.11	5427.22	5427.50	0.032175	5.01	14.96	35.12	1.35			5.01	0.90
89.875*	75.0	5425.98	5426.92	5427.00	5427.28	0.023858	4.80	15.63	31.35	1.20			4.80	0.94
89.75*	75.0	5425.75	5426.72	5426.76	5427.07	0.020043	4.71	15.93	28.83	1.12			4.71	0.97
89.625*	75.0	5425.52	5426.60	5426.55	5426.87	0.012572	4.18	17.95	27.36	0.91			4.18	1.08
89.5	75.0	5425.29	5426.35	5426.35	5426.69	0.015664	4.65	16.12	24.57	1.01			4.65	1.06
89.4166*	75.0	5425.08	5426.14	5426.20	5426.54	0.020812	5.07	14.80	24.62	1.15			5.07	1.06
89.3333*	75.0	5424.87	5425.99	5426.06	5426.37	0.019985	4.93	15.21	25.63	1.13			4.93	1.12
89.25	75.0	5424.66	5426.06	5425.88	5426.23	0.006795	3.31	22.63	30.77	0.68			3.31	1.40
89.125*	75.0	5424.40	5426.04	5425.64	5426.15	0.003231	2.56	29.28	33.54	0.48			2.56	1.64
89	75.0	5424.13	5426.04	5425.38	5426.10	0.001601	1.93	38.93	40.43	0.35			1.93	1.91
88.8266*	75.0	5423.95	5425.98	5425.37	5426.06	0.002397	2.34	32.00	33.42	0.42			2.34	2.03
88.6533*	75.0	5423.77	5425.92	5425.30	5426.02	0.002643	2.53	29.67	29.68	0.45			2.53	2.15
88.48	75.0	5423.59	5425.87	5425.21	5425.97	0.002573	2.59	28.96	27.26	0.44			2.59	2.28
88.2400*	75.0	5423.60	5425.81	5425.20	5425.91	0.002687	2.59	28.91	28.11	0.45			2.59	2.21
88	75.0	5423.60	5425.77	5425.09	5425.85	0.001952	2.32	32.37	29.34	0.39			2.32	2.16
87.875*	75.0	5423.66	5425.72	5425.14	5425.82	0.002546	2.57	29.21	27.73	0.44			2.57	2.06
87.75*	75.0	5423.72	5425.66	5425.19	5425.78	0.003348	2.82	26.56	26.86	0.50			2.82	1.94
87.625*	75.0	5423.78	5425.58	5425.23	5425.73	0.004767	3.16	23.77	26.57	0.59			3.16	1.80
87.5	75.0	5423.84	5425.41	5425.25	5425.65	0.008893	3.93	19.07	24.46	0.78			3.93	1.56
87.3333*	75.0	5423.84	5425.28	5425.13	5425.50	0.008302	3.74	20.07	26.44	0.76			3.74	1.44
87.1666*	75.0	5423.84	5425.20	5424.96	5425.36	0.005846	3.30	22.72	27.72	0.64			3.30	1.36
87	75.0	5423.84	5425.15	5424.76	5425.27	0.003598	2.83	26.53	28.21	0.51			2.83	1.30
86.74	75.0	5423.82	5425.06	5424.65	5425.18	0.003357	2.76	27.18	28.39	0.50			2.76	1.24
86.62*	75.0	5423.73	5425.00	5424.65	5425.13	0.004280	2.96	25.33	28.59	0.55			2.96	1.26
86.5	75.0	5423.64	5424.84	5424.66	5425.06	0.007942	3.72	20.18	25.66	0.74			3.72	1.20
86.3849*	75.0	5423.55	5424.63	5424.59	5424.93	0.014029	4.39	17.08	26.08	0.96			4.39	1.08
86.27	75.0	5423.47	5424.68	5424.36	5424.77	0.003160	2.33	32.22	41.68	0.47			2.33	1.21
86.1349*	75.0	5423.31	5424.61	5424.36	5424.72	0.004394	2.64	28.44	39.17	0.55			2.64	1.30
86	75.0	5423.15	5424.45	5424.37	5424.63	0.009780	3.41	21.99	37.56	0.79			3.41	1.29
85.8*	75.0	5422.90	5424.30	5424.12	5424.45	0.007281	3.10	24.18	38.28	0.69			3.10	1.40
85.6	75.0	5422.64	5424.21	5423.86	5424.32	0.004058	2.60	28.87	38.46	0.53			2.60	1.57
85.35*	75.0	5422.58	5424.13	5423.76	5424.22	0.003505	2.49	30.08	38.17	0.49			2.49	1.55
85.1*	75.0	5422.52	5424.05	5423.65	5424.14	0.003018	2.38	31.45	38.11	0.46			2.38	1.53
84.85	75.0	5422.46	5423.99	5423.56	5424.07	0.002563	2.26	33.13	38.39	0.43			2.26	1.53
84.6833*	75.0	5422.36	5423.89	5423.60	5424.01	0.004687	2.72	27.57	38.18	0.56			2.72	1.53
84.5166*	75.0	5422.27	5423.75	5423.50	5423.91	0.005976	3.28	22.90	28.72	0.65			3.28	1.48
84.35	75.0	5422.17	5423.71	5423.31	5423.82	0.003346	2.60	28.86	32.97	0.49			2.60	1.54
84.2333*	75.0	5422.17	5423.68	5423.31	5423.78	0.003206	2.45	30.57	40.32	0.48			2.45	1.51
84.1166*	75.0	5422.17	5423.66	5423.25	5423.73	0.002859	2.12	35.30	49.03	0.44			2.12	1.49
84	75.0	5422.17	5423.65	5423.14	5423.70	0.001797	1.76	42.59	55.38	0.35			1.76	1.48
83.75	75.0	5422.39	5423.34	5423.34	5423.60	0.016768	4.05	18.50	36.78	1.01			4.05	0.95
83.625*	75.0	5422.08	5422.80	5422.94	5423.20	0.044890	5.06	14.84	44.34	1.54			5.06	0.72
83.5	75.0	5421.77	5422.97	5422.48	5422.99	0.000691	1.00	74.92	110.84	0.21			1.00	1.20
83.3849*	75.0	5421.42	5422.95	5422.30	5422.98	0.000779	1.23	61.16	73.07	0.24			1.23	1.53
83.27	75.0	5421.08	5422.89	5422.20	5422.96	0.001635	2.13	35.28	32.00	0.36			2.13	1.81
83	75.0	5420.96	5422.83	5422.26	5422.91	0.002184	2.26	33.18	34.13	0.40			2.26	1.87
82.8825*	75.0	5420.96	5422.83	5422.15	5422.88	0.001465	1.82	41.31	43.91	0.33			1.82	1.87
82.765*	75.0	5420.96	5422.82	5422.06	5422.86	0.001035	1.55	48.47	50.50	0.28			1.55	1.86
82.6475*	75.0	5420.97	5422.82	5422.00	5422.85	0.000781	1.35	55.45	57.25	0.24			1.35	1.85
82.53	75.0	5420.97	5422.81	5421.96	5422.84	0.000559	1.20	62.73	60.64	0.21			1.20	1.84
82.3999*	75.0	5420.95	5422.81	5421.92	5422.83	0.000560	1.21	61.73	58.32	0.21			1.21	1.85
82.27	75.0	5420.93	5422.78	5421.85	5422.82	0.000738	1.52	49.37	40.33	0.24			1.52	1.85
82.1349*	75.0	5421.01	5422.75	5422.07	5422.80	0.001459	1.92	38.96	37.49	0.33			1.92	1.74
82	75.0	5421.09	5422.66	5422.29	5422.77	0.003892	2.71	27.63	33.32	0.53			2.71	1.56

Profile Output Table - No Name Arroyo Reconstructed Channel 2yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	75.0	5421.00	5422.57	5422.27	5422.71	0.005035	3.02	24.81	30.89	0.59			3.02	1.57
81.75*	75.0	5420.92	5422.48	5422.22	5422.64	0.005833	3.22	23.32	29.47	0.64			3.22	1.56
81.625*	75.0	5420.83	5422.39	5422.16	5422.56	0.006567	3.36	22.29	28.68	0.67			3.36	1.56
81.5	75.0	5420.75	5422.25	5422.14	5422.47	0.009044	3.73	20.12	28.09	0.78			3.73	1.50
81.25	75.0	5420.52	5421.72	5421.72	5422.17	0.013754	5.38	13.94	15.24	0.99			5.38	1.20
81.125*	75.0	5420.39	5421.51	5421.57	5421.98	0.017682	5.49	13.66	17.63	1.10			5.49	1.12
81	75.0	5420.26	5421.55	5421.43	5421.80	0.009573	3.96	18.94	25.21	0.81			3.96	1.29
80.875*	75.0	5420.13	5421.49	5421.21	5421.69	0.005721	3.57	20.99	22.18	0.65			3.57	1.36
80.75	75.0	5420.01	5421.44	5421.04	5421.62	0.004214	3.38	22.19	20.14	0.57			3.38	1.43
80.5	75.0	5419.78	5421.10	5420.98	5421.45	0.009785	4.78	15.70	15.89	0.85			4.78	1.32
80.25*	75.0	5419.54	5420.86	5420.73	5421.21	0.009724	4.77	15.74	15.90	0.84			4.77	1.32
80	75.0	5419.29	5420.61	5420.49	5420.96	0.009737	4.77	15.73	15.90	0.84			4.77	1.32
79.775*	75.0	5419.07	5420.39	5420.28	5420.75	0.009757	4.77	15.72	15.90	0.85			4.77	1.32
79.55	75.0	5418.85	5420.17	5420.06	5420.52	0.009923	4.80	15.62	15.84	0.85			4.80	1.32
79.465*	75.0	5418.77	5420.08	5419.98	5420.44	0.009994	4.81	15.59	15.86	0.85			4.81	1.31
79.38*	75.0	5418.69	5420.00	5419.88	5420.36	0.009976	4.80	15.63	15.95	0.85			4.80	1.31
79.295*	75.0	5418.60	5419.92	5419.80	5420.27	0.009809	4.77	15.73	16.00	0.85			4.77	1.31
79.21*	75.0	5418.52	5419.84	5419.67	5420.18	0.009636	4.73	15.84	16.06	0.84			4.73	1.32
79.125*	75.0	5418.44	5419.76	5419.64	5420.10	0.009472	4.70	15.97	16.18	0.83			4.70	1.32
79.04	75.0	5418.36	5419.68	5419.55	5420.02	0.009315	4.67	16.08	16.26	0.83			4.67	1.32
78.77	75.0	5418.10	5419.42	5419.29	5419.77	0.009587	4.73	15.85	16.02	0.84			4.73	1.32
78.5	75.0	5417.83	5419.15	5419.03	5419.50	0.009710	4.76	15.75	15.90	0.84			4.76	1.32
78.375*	75.0	5417.71	5419.02	5418.90	5419.38	0.009787	4.78	15.70	15.89	0.85			4.78	1.31
78.25*	75.0	5417.58	5418.90	5418.77	5419.25	0.009697	4.74	15.83	16.11	0.84			4.74	1.32
78.125*	75.0	5417.46	5418.78	5418.65	5419.13	0.009754	4.75	15.81	16.12	0.84			4.75	1.32
78	75.0	5417.34	5418.66	5418.53	5419.01	0.009656	4.75	15.78	15.92	0.84			4.75	1.32
77.7966*	75.0	5417.14	5418.46	5418.33	5418.81	0.009696	4.76	15.75	15.91	0.84			4.76	1.32
77.5933*	75.0	5416.94	5418.26	5418.13	5418.62	0.009808	4.78	15.70	15.92	0.85			4.78	1.32
77.39	75.0	5416.74	5418.07	5417.94	5418.42	0.009702	4.76	15.75	15.91	0.84			4.76	1.33
77.2666*	75.0	5416.62	5417.94	5417.82	5418.30	0.009726	4.77	15.74	15.91	0.84			4.77	1.32
77.1433*	75.0	5416.50	5417.82	5417.70	5418.18	0.009812	4.78	15.70	15.91	0.85			4.78	1.32
77.02*	75.0	5416.38	5417.70	5417.57	5418.05	0.009709	4.76	15.74	15.91	0.84			4.76	1.32
76.8966*	75.0	5416.26	5417.58	5417.45	5417.93	0.009775	4.78	15.70	15.88	0.85			4.78	1.32
76.7733*	75.0	5416.14	5417.46	5417.33	5417.81	0.009808	4.78	15.69	15.88	0.85			4.78	1.32
76.65	75.0	5416.02	5417.34	5417.21	5417.69	0.009778	4.77	15.71	15.89	0.85			4.77	1.32
76.4666*	75.0	5415.84	5417.16	5417.03	5417.51	0.009731	4.77	15.74	15.90	0.84			4.77	1.32
76.2833*	75.0	5415.66	5416.97	5416.85	5417.33	0.009849	4.79	15.66	15.86	0.85			4.79	1.31
76.1	75.0	5415.48	5416.76	5416.69	5417.14	0.010720	4.93	15.20	15.69	0.88			4.93	1.28
75.984*	75.0	5415.36	5416.67	5416.54	5417.01	0.009435	4.68	16.02	16.28	0.83			4.68	1.31
75.868*	75.0	5415.25	5416.60	5416.41	5416.90	0.008138	4.41	17.01	16.94	0.78			4.41	1.35
75.752*	75.0	5415.13	5416.55	5416.28	5416.80	0.006423	4.02	18.64	17.83	0.69			4.02	1.42
75.6359*	75.0	5415.02	5416.49	5416.15	5416.71	0.007718	3.71	20.23	25.28	0.73			3.71	1.47
75.52	75.0	5414.90	5416.44	5416.02	5416.61	0.006488	3.34	22.45	28.86	0.67			3.34	1.53
75.3466*	75.0	5414.74	5416.31	5415.88	5416.48	0.008329	3.28	22.87	36.55	0.73			3.28	1.57
75.1733*	75.0	5414.57	5416.16	5415.74	5416.33	0.008202	3.31	22.62	35.12	0.73			3.31	1.59
75	75.0	5414.41	5415.98	5415.60	5416.18	0.009798	3.57	21.04	33.41	0.79			3.57	1.57
74.8*	75.0	5414.21	5415.78	5415.40	5415.98	0.009960	3.58	20.95	33.48	0.80			3.58	1.57
74.6*	75.0	5414.01	5415.59	5415.20	5415.78	0.009735	3.55	21.14	33.65	0.79			3.55	1.58
74.4	75.0	5413.81	5415.39	5415.02	5415.58	0.009894	3.56	21.05	33.73	0.79			3.56	1.58
74.2*	75.0	5413.62	5415.19	5414.83	5415.39	0.009678	3.54	21.18	33.67	0.79			3.54	1.57
74	75.0	5413.43	5414.99	5414.63	5415.19	0.010182	3.60	20.82	33.53	0.81			3.60	1.56
73.9166*	75.0	5413.34	5414.91	5414.52	5415.10	0.009935	3.57	21.03	33.75	0.80			3.57	1.56
73.8333*	75.0	5413.26	5414.82	5414.46	5415.02	0.009934	3.56	21.07	33.93	0.80			3.56	1.56
73.75	75.0	5413.17	5414.74	5414.36	5414.93	0.009590	3.51	21.36	34.18	0.78			3.51	1.57
73.5	75.0	5412.92	5414.52	5414.13	5414.71	0.008587	3.41	21.99	33.80	0.75			3.41	1.60
73.375*	75.0	5412.80	5414.45	5414.01	5414.61	0.006291	3.22	23.26	30.81	0.65			3.22	1.65
73.25	75.0	5412.68	5414.40	5413.89	5414.53	0.004926	2.87	26.15	34.33	0.58			2.87	1.72
73	75.0	5412.44	5414.34	5413.63	5414.42	0.002498	2.31	32.47	35.41	0.43			2.31	1.90
72.77	75.0	5412.20	5414.31	5413.41	5414.37	0.001279	1.86	40.42	37.01	0.31			1.86	2.11
72.615*	75.0	5412.05	5414.31	5413.18	5414.35	0.000651	1.46	51.28	40.52	0.23			1.46	2.26
72.46	75.0	5411.90	5414.31	5412.95	5414.34	0.000366	1.19	62.95	43.99	0.18			1.19	2.41
72.23	75.0	5411.77	5414.26	5413.15	5414.32	0.000983	2.03	37.02	24.07	0.29			2.03	2.48
72.1150*	75.0	5411.79	5414.19	5413.32	5414.30	0.001851	2.69	27.84	18.81	0.39			2.69	2.40
72	75.0	5411.82	5414.02	5413.49	5414.26	0.004290	3.94	19.04	13.25	0.58			3.94	2.20
71.78	75.0	5411.71	5413.66	5413.52	5414.11	0.009564	5.34	14.04	11.29	0.84			5.34	1.95
71.6866*	75.0	5411.68	5413.50	5413.44	5414.01	0.012099	5.70	13.15	11.60	0.94			5.70	1.82
71.5933*	75.0	5411.66	5413.38	5413.38	5413.89	0.013220	5.72	13.12	12.48	0.98			5.72	1.72
71.5	75.0	5411.63	5413.22	5413.23	5413.76	0.014240	5.88	12.75	12.13	1.01			5.88	1.59
71.375*	75.0	5411.47	5412.84	5412.98	5413.52	0.021635	6.63	11.32	12.58	1.23			6.63	1.37
71.25*	75.0	5411.31	5412.69	5412.76	5413.25	0.018241	6.01	12.48	14.27	1.13			6.01	1.38
71.125*	75.0	5411.15	5412.47	5412.59	5412.96	0.023374	5.59	13.42	20.84	1.23			5.59	1.32

Profile Output Table - No Name Arroyo Reconstructed Channel 2yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71	75.0	5410.99	5412.57	5412.22	5412.71	0.003845	2.92	25.67	26.89	0.53			2.92	1.58
70.875*	75.0	5410.89	5412.47	5412.24	5412.64	0.006167	3.35	22.41	27.61	0.65			3.35	1.58
70.75	75.0	5410.79	5412.34	5412.01	5412.55	0.009792	3.61	20.79	32.41	0.79			3.61	1.55
70.6166*	75.0	5410.69	5412.23	5411.89	5412.42	0.009086	3.50	21.40	33.03	0.77			3.50	1.54
70.4833*	75.0	5410.58	5412.13	5411.79	5412.30	0.007946	3.32	22.59	34.23	0.72			3.32	1.55
70.35	75.0	5410.48	5412.12	5411.65	5412.19	0.003044	2.13	35.13	50.05	0.45			2.13	1.64
70.175*	75.0	5410.35	5412.00	5411.53	5412.12	0.005896	2.80	26.78	41.99	0.62			2.80	1.65
70	75.0	5410.22	5411.87	5411.41	5412.00	0.007031	2.95	25.42	41.95	0.67			2.95	1.65
69.75*	75.0	5410.04	5411.67	5411.22	5411.82	0.007385	3.12	24.06	37.91	0.69			3.12	1.63
69.5	75.0	5409.85	5411.47	5411.04	5411.64	0.007567	3.27	22.90	34.04	0.70			3.27	1.62
69.3333*	75.0	5409.72	5411.34	5410.91	5411.51	0.007593	3.28	22.85	33.91	0.70			3.28	1.62
69.1666*	75.0	5409.59	5411.21	5410.78	5411.38	0.007565	3.28	22.85	33.85	0.70			3.28	1.62
69	75.0	5409.46	5411.08	5410.65	5411.25	0.007663	3.30	22.73	33.72	0.71			3.30	1.62
68.75*	75.0	5409.27	5410.89	5410.46	5411.06	0.007688	3.30	22.71	33.74	0.71			3.30	1.62
68.5	75.0	5409.08	5410.70	5410.27	5410.87	0.007723	3.31	22.68	33.72	0.71			3.31	1.62
68.375*	75.0	5408.98	5410.59	5410.19	5410.77	0.008160	3.37	22.28	35.60	0.73			3.37	1.61
68.25	75.0	5408.88	5410.43	5410.09	5410.65	0.010988	3.70	20.29	37.79	0.83			3.70	1.55
68.13	75.0	5408.78	5410.36	5409.93	5410.51	0.007796	3.18	23.58	46.25	0.71			3.18	1.58
67.99	75.0	5408.64	5410.39	5409.45	5410.42	0.000781	1.43	52.33	49.22	0.24			1.43	1.75
67.89*	75.0	5408.58	5410.36	5409.56	5410.41	0.001413	1.74	43.06	47.16	0.32			1.74	1.78
67.79	75.0	5408.51	5410.31	5409.56	5410.38	0.002822	2.12	35.35	48.33	0.44			2.12	1.80
67.65	75.0	5408.41	5410.25	5409.60	5410.34	0.003055	2.42	31.04	36.85	0.46			2.42	1.84
67.4	75.0	5408.21	5410.21	5409.57	5410.27	0.001745	2.11	35.50	33.77	0.36			2.11	1.99
67.2*	75.0	5407.99	5410.17	5409.31	5410.24	0.001321	2.16	34.80	25.91	0.33			2.16	2.18
67	75.0	5407.77	5410.03	5409.48	5410.20	0.003421	3.24	23.18	19.01	0.52			3.24	2.26
66.75*	75.0	5407.70	5409.93	5409.40	5410.11	0.003807	3.36	22.33	18.82	0.54			3.36	2.23
66.5	75.0	5407.63	5409.85	5409.24	5410.01	0.003159	3.22	23.33	18.18	0.50			3.22	2.22
66.255*	75.0	5407.58	5409.74	5409.27	5409.92	0.004052	3.44	21.83	18.64	0.56			3.44	2.16
66.01	75.0	5407.52	5409.40	5409.25	5409.76	0.010641	4.84	15.49	15.85	0.86			4.84	1.88
65.84*	75.0	5407.39	5409.25	5409.08	5409.59	0.008963	4.68	16.03	15.50	0.81			4.68	1.86
65.67*	75.0	5407.25	5409.16	5408.90	5409.44	0.006843	4.22	17.79	16.56	0.72			4.22	1.91
65.5	75.0	5407.12	5409.10	5408.75	5409.32	0.005199	3.72	20.19	18.53	0.63			3.72	1.98
65.25*	75.0	5406.85	5408.97	5408.63	5409.18	0.005517	3.71	20.24	19.44	0.64			3.71	2.12
65	75.0	5406.58	5408.69	5408.52	5409.00	0.008775	4.49	16.72	16.79	0.79			4.49	2.11
64.8*	75.0	5406.58	5408.63	5408.26	5408.83	0.005073	3.61	20.80	19.57	0.62			3.61	2.05
64.6*	75.0	5406.58	5408.58	5408.08	5408.73	0.003161	3.07	24.42	20.54	0.50			3.07	2.00
64.4	75.0	5406.58	5408.55	5407.84	5408.67	0.002115	2.73	27.43	20.13	0.41			2.73	1.97
64.175*	75.0	5406.38	5408.50	5407.97	5408.61	0.002843	2.72	27.61	25.62	0.46			2.72	2.12
63.95	75.0	5406.17	5408.15	5407.95	5408.49	0.008399	4.71	15.92	18.26	0.79			4.71	1.98
63.7633*	75.0	5405.99	5408.01	5407.81	5408.33	0.008240	4.55	16.49	18.99	0.78			4.55	2.02
63.5766*	75.0	5405.81	5407.90	5407.65	5408.16	0.008555	4.10	18.31	21.03	0.77			4.10	2.09
63.39	75.0	5405.63	5407.77	5407.49	5408.01	0.006894	3.95	18.99	19.69	0.71			3.95	2.14
63.2066*	75.0	5405.46	5407.64	5407.37	5407.88	0.007422	3.94	19.03	20.93	0.73			3.94	2.18
63.0233*	75.0	5405.30	5407.60	5407.27	5407.74	0.004319	2.94	25.47	29.00	0.55			2.94	2.30
62.84	75.0	5405.13	5407.60	5406.87	5407.66	0.001283	1.96	38.36	32.31	0.32			1.96	2.47
62.6	75.0	5405.13	5407.59	5406.77	5407.63	0.000940	1.64	45.81	40.23	0.27			1.64	2.46
62.475*	75.0	5405.13	5407.52	5406.93	5407.61	0.002473	2.43	30.90	31.09	0.43			2.43	2.39
62.35	75.0	5405.13	5407.47	5406.86	5407.58	0.002403	2.69	27.88	23.02	0.43			2.69	2.34
62.175*	75.0	5405.10	5407.36	5406.83	5407.52	0.003582	3.20	23.43	20.24	0.52			3.20	2.26
62	75.0	5405.08	5407.29	5406.76	5407.46	0.003524	3.26	23.03	18.99	0.52			3.26	2.21
61.75*	75.0	5405.03	5407.03	5406.84	5407.32	0.008473	4.36	17.21	17.93	0.78			4.36	2.00
61.5	75.0	5404.98	5406.93	5406.56	5407.13	0.004691	3.54	21.16	19.23	0.60			3.54	1.95
61.25*	75.0	5404.82	5406.73	5406.49	5406.98	0.007132	4.02	18.68	19.43	0.72			4.02	1.91
61	75.0	5404.66	5406.61	5406.29	5406.80	0.005596	3.53	21.25	22.43	0.64			3.53	1.95
60.75*	75.0	5404.53	5406.51	5406.14	5406.66	0.004878	3.13	23.94	27.45	0.59			3.13	1.98
60.5	75.0	5404.39	5406.43	5405.92	5406.54	0.003502	2.76	27.15	29.27	0.51			2.76	2.04
60.25*	75.0	5404.26	5406.29	5405.82	5406.45	0.004093	3.15	23.83	23.68	0.55			3.15	2.03
60	75.0	5404.13	5406.18	5405.68	5406.35	0.003744	3.26	22.99	20.09	0.54			3.26	2.05
59.75*	75.0	5404.00	5406.10	5405.57	5406.25	0.003435	3.12	24.01	21.00	0.51			3.12	2.10
59.5	75.0	5403.88	5406.01	5405.48	5406.16	0.003598	3.18	23.60	20.65	0.52			3.18	2.13
59.25*	75.0	5403.84	5405.84	5405.45	5406.05	0.005455	3.69	20.33	19.57	0.64			3.69	2.00
59	75.0	5403.80	5405.65	5405.35	5405.90	0.006357	4.02	18.67	17.53	0.69			4.02	1.85
58.82*	75.0	5403.67	5405.54	5405.24	5405.78	0.006215	3.89	19.26	18.79	0.68			3.89	1.87
58.64*	75.0	5403.54	5405.46	5405.13	5405.67	0.005363	3.61	20.78	20.46	0.63			3.61	1.92
58.46	75.0	5403.41	5405.41	5404.98	5405.57	0.003994	3.23	23.23	26.60	0.55			3.23	2.00
58.23*	75.0	5403.30	5405.32	5404.83	5405.48	0.003546	3.18	23.59	20.58	0.52			3.18	2.02
58	75.0	5403.19	5405.26	5404.67	5405.40	0.003010	3.06	24.49	24.62	0.49			3.06	2.06
57.8825*	75.0	5403.17	5405.21	5404.68	5405.36	0.003285	3.10	24.22	21.69	0.51			3.10	2.04
57.765*	75.0	5403.16	5405.17	5404.68	5405.32	0.003495	3.12	24.07	21.48	0.52			3.12	2.01
57.6475*	75.0	5403.14	5405.13	5404.62	5405.28	0.003751	3.16	23.75	28.59	0.53			3.16	1.98
57.53	75.0	5403.12	5405.07	5404.56	5405.23	0.004027	3.24	23.17	38.73	0.55			3.24	1.95

Profile Output Table - No Name Arroyo Reconstructed Channel 2yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 1

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.38	75.0	5403.07	5405.01	5404.60	5405.18	0.004091	3.27	22.99	33.02	0.56		0.28	3.26	1.94
57.23	75.0	5403.06	5405.02	5404.37	5405.11	0.001844	2.30	32.59	28.62	0.38			2.30	1.96
57	75.0	5403.03	5404.92	5404.34	5405.05	0.002688	2.90	25.82	20.98	0.46			2.90	1.89
56.75*	75.0	5402.90	5404.83	5404.28	5404.98	0.003117	3.12	24.05	19.57	0.50			3.12	1.93
56.5	75.0	5402.77	5404.74	5404.22	5404.90	0.003310	3.16	23.76	19.84	0.51			3.16	1.97
56.375*	75.0	5402.67	5404.69	5404.19	5404.85	0.003454	3.20	23.41	19.72	0.52			3.20	2.02
56.25*	75.0	5402.58	5404.64	5404.15	5404.81	0.003652	3.26	23.02	19.72	0.53			3.26	2.06
56.125*	75.0	5402.48	5404.59	5404.10	5404.76	0.003834	3.30	22.73	19.79	0.54			3.30	2.11
56	75.0	5402.38	5404.54	5404.06	5404.71	0.003939	3.31	22.68	20.05	0.55			3.31	2.16
55.875*	75.0	5402.38	5404.50	5404.00	5404.66	0.003746	3.28	22.89	19.74	0.54			3.28	2.12
55.75*	75.0	5402.38	5404.46	5403.94	5404.62	0.003464	3.22	23.32	19.46	0.52			3.22	2.08
55.625*	75.0	5402.38	5404.42	5403.88	5404.57	0.003223	3.16	23.70	19.15	0.50			3.16	2.04
55.5	75.0	5402.38	5404.38	5403.81	5404.53	0.002974	3.10	24.18	18.87	0.48			3.10	2.00
55.375*	75.0	5402.38	5404.36	5403.79	5404.49	0.002730	2.88	26.04	21.49	0.46			2.88	1.98
55.25*	75.0	5402.38	5404.34	5403.73	5404.45	0.002600	2.72	27.59	24.11	0.45			2.72	1.96
55.125*	75.0	5402.38	5404.31	5403.79	5404.42	0.002600	2.61	28.72	26.76	0.44			2.61	1.93
55	75.0	5402.38	5404.28	5403.78	5404.38	0.002657	2.54	29.57	29.36	0.45			2.54	1.90
54.875*	75.0	5402.38	5404.24	5403.79	5404.35	0.002941	2.64	28.41	28.69	0.47			2.64	1.86
54.75*	75.0	5402.38	5404.19	5403.77	5404.31	0.003273	2.75	27.25	28.06	0.49			2.75	1.81
54.625*	75.0	5402.37	5404.13	5403.76	5404.26	0.003707	2.89	25.96	27.29	0.52			2.89	1.76
54.5	75.0	5402.37	5404.07	5403.74	5404.21	0.004386	3.07	24.42	26.58	0.56			3.07	1.69
54.25*	75.0	5402.29	5403.97	5403.57	5404.11	0.003807	2.99	25.08	25.55	0.53			2.99	1.68
54	75.0	5402.20	5403.86	5403.40	5404.01	0.003902	3.08	24.33	23.75	0.54			3.08	1.66
53.8233*	75.0	5402.10	5403.81	5403.38	5403.94	0.003726	2.96	25.36	25.71	0.52			2.96	1.70
53.6466*	75.0	5402.01	5403.75	5403.32	5403.87	0.003718	2.87	26.15	48.20	0.52			2.87	1.74
53.47	75.0	5401.91	5403.68	5403.31	5403.80	0.003902	2.80	26.79	74.72	0.53			2.80	1.77
Max							5.49						Avg	3.74
Min							1.19							
Avg							3.74							

Only the reconstructed channel reaches were included in determining the maximum, minimum, and average velocities. The reconstructed reaches are from Station 81.50 to 72.23 and from Station 71.00 to 67.00.

Profile Output Table - No Name Arroyo Reconstructed Channel 10yr-6hr
HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92	278.0	5430.37	5434.83	5431.58	5434.85	0.000098	1.12	247.99	69.85	0.10			1.12	4.46
91.8925*	278.0	5430.22	5434.82	5431.80	5434.85	0.000156	1.38	201.91	58.91	0.13			1.38	4.60
91.785*	278.0	5430.07	5434.80	5432.00	5434.85	0.000265	1.74	159.96	48.36	0.17			1.74	4.73
91.6775*	278.0	5429.92	5434.76	5432.20	5434.84	0.000485	2.28	122.02	37.95	0.22			2.28	4.84
91.57	278.0	5429.77	5434.67	5432.47	5434.82	0.001018	3.18	87.48	27.70	0.32			3.18	4.90
91.465*	278.0	5429.59	5434.58	5432.79	5434.80	0.001564	3.77	73.72	24.85	0.39			3.77	4.99
91.36*	278.0	5429.42	5434.46	5433.06	5434.77	0.002486	4.54	61.28	22.03	0.48			4.54	5.03
91.255*	278.0	5429.25	5434.24	5433.32	5434.72	0.004259	5.60	49.61	19.21	0.61			5.60	4.99
91.15	278.0	5429.07	5433.52	5433.52	5434.60	0.011964	8.34	33.34	14.98	0.99			8.34	4.45
91.0533*	278.0	5428.81	5432.34	5432.99	5434.31	0.029708	11.27	24.66	14.60	1.53			11.27	3.53
90.9566*	278.0	5428.55	5431.82	5432.56	5433.98	0.033279	11.80	23.57	14.35	1.62			11.80	3.27
90.86	278.0	5428.29	5431.39	5432.23	5433.64	0.036223	12.04	23.10	14.69	1.69			12.04	3.09
90.6	278.0	5427.43	5430.37	5431.13	5432.66	0.037535	12.17	22.85	14.75	1.72			12.17	2.93
90.45*	278.0	5426.88	5429.53	5430.33	5432.02	0.047229	12.66	21.95	16.20	1.92			12.66	2.65
90.3	278.0	5426.33	5428.58	5429.40	5431.21	0.057723	13.02	21.35	17.82	2.10			13.02	2.25
90.2*	278.0	5426.29	5428.13	5428.86	5430.51	0.066393	12.39	22.44	22.96	2.21			12.39	1.84
90.1*	278.0	5426.25	5427.80	5428.37	5429.71	0.066356	11.08	25.09	30.70	2.16			11.08	1.55
90	278.0	5426.21	5427.47	5427.92	5428.95	0.060881	9.78	28.43	39.41	2.03			9.78	1.25
89.875*	278.0	5425.98	5427.68	5427.76	5428.32	0.015176	6.44	43.20	39.57	1.09			6.44	1.70
89.75*	278.0	5425.75	5427.68	5427.57	5428.19	0.009789	5.70	48.75	38.49	0.89			5.70	1.93
89.625*	278.0	5425.52	5427.57	5427.43	5428.07	0.009023	5.66	49.10	36.78	0.86			5.66	2.05
89.5	278.0	5425.29	5427.28	5427.28	5427.93	0.012450	6.45	43.10	33.63	1.00			6.45	1.99
89.4166*	278.0	5425.08	5426.93	5427.09	5427.78	0.019045	7.41	37.49	32.78	1.22			7.41	1.85
89.3333*	278.0	5424.87	5427.24	5426.94	5427.64	0.006309	5.05	55.02	37.20	0.73			5.05	2.37
89.25	278.0	5424.66	5427.28	5426.69	5427.56	0.003635	4.27	65.18	37.36	0.57			4.27	2.62
89.125*	278.0	5424.40	5427.32	5426.50	5427.49	0.002264	3.30	84.23	50.21	0.45			3.30	2.92
89	278.0	5424.13	5427.33	5426.22	5427.45	0.001432	2.86	97.06	53.71	0.37			2.86	3.19
88.8266*	278.0	5423.95	5427.28	5426.35	5427.42	0.002140	3.01	92.32	60.77	0.43			3.01	3.33
88.6533*	278.0	5423.77	5427.20	5426.35	5427.37	0.003159	3.38	82.28	61.03	0.51			3.38	3.43
88.48	278.0	5423.59	5427.13	5426.34	5427.32	0.002973	3.47	80.12	54.43	0.50			3.47	3.54
88.2400*	278.0	5423.60	5427.07	5426.30	5427.24	0.002813	3.31	84.06	59.01	0.49			3.31	3.47
88	278.0	5423.60	5426.93	5426.09	5427.17	0.002614	3.91	71.05	36.04	0.49			3.91	3.33
87.875*	278.0	5423.66	5426.86	5426.14	5427.13	0.003234	4.21	65.96	35.26	0.54			4.21	3.19
87.75*	278.0	5423.72	5426.76	5426.17	5427.08	0.004088	4.58	60.76	34.32	0.61			4.58	3.04
87.625*	278.0	5423.78	5426.63	5426.19	5427.02	0.005264	5.02	55.41	32.95	0.68			5.02	2.85
87.5	278.0	5423.84	5426.38	5426.19	5426.92	0.008448	5.91	47.07	31.25	0.85			5.91	2.53
87.3333*	278.0	5423.84	5426.30	5426.02	5426.76	0.006827	5.43	51.16	32.88	0.77			5.43	2.46
87.1666*	278.0	5423.84	5426.26	5425.85	5426.64	0.005275	4.96	56.07	34.01	0.68			4.96	2.42
87	278.0	5423.84	5426.22	5425.68	5426.54	0.004154	4.56	60.95	34.83	0.61			4.56	2.37
86.74	278.0	5423.82	5426.14	5425.60	5426.42	0.004207	4.30	64.61	40.87	0.60			4.30	2.32
86.62*	278.0	5423.73	5426.10	5425.58	5426.36	0.005133	4.09	67.96	54.07	0.64			4.09	2.37
86.5	278.0	5423.64	5425.62	5425.62	5426.24	0.012743	6.31	44.07	35.94	1.00			6.31	1.98
86.3849*	278.0	5423.55	5425.30	5425.49	5426.01	0.026179	6.75	41.16	52.58	1.35			6.75	1.75
86.27	278.0	5423.47	5425.59	5425.04	5425.83	0.003396	3.91	71.19	44.08	0.54			3.91	2.12
86.1349*	278.0	5423.31	5425.48	5425.00	5425.77	0.004541	4.34	64.04	42.22	0.62			4.34	2.17
86	278.0	5423.15	5425.26	5425.05	5425.68	0.007588	5.18	53.63	39.85	0.79			5.18	2.11
85.8*	278.0	5422.90	5425.20	5424.84	5425.52	0.005372	4.60	60.46	41.73	0.67			4.60	2.30
85.6	278.0	5422.64	5425.15	5424.64	5425.41	0.003873	4.09	68.01	43.82	0.58			4.09	2.51
85.35*	278.0	5422.58	5425.06	5424.52	5425.32	0.003707	4.08	68.19	42.69	0.57			4.08	2.48
85.1*	278.0	5422.52	5424.97	5424.40	5425.23	0.003526	4.04	68.83	42.02	0.56			4.04	2.45
84.85	278.0	5422.46	5424.89	5424.30	5425.14	0.003370	3.99	69.61	41.73	0.54			3.99	2.43
84.6833*	278.0	5422.36	5424.83	5424.36	5425.08	0.004026	4.00	69.42	47.72	0.59			4.00	2.47
84.5166*	278.0	5422.27	5424.53	5424.42	5424.96	0.009945	5.26	52.80	47.64	0.88			5.26	2.26
84.35	278.0	5422.17	5424.38	5424.16	5424.81	0.008294	5.28	52.61	40.69	0.82			5.28	2.20
84.2333*	278.0	5422.17	5424.44	5424.10	5424.67	0.005330	3.89	71.55	63.76	0.65			3.89	2.26
84.1166*	278.0	5422.17	5424.41	5423.98	5424.60	0.003988	3.52	79.00	75.89	0.57			3.52	2.24
84	278.0	5422.17	5424.41	5423.83	5424.54	0.002803	2.95	94.14	78.62	0.48			2.95	2.24
83.75	278.0	5422.39	5424.10	5424.03	5424.41	0.011241	4.53	61.40	88.84	0.89			4.53	1.70
83.625*	278.0	5422.08	5424.20	5423.41	5424.26	0.001112	1.98	140.34	106.64	0.30			1.98	2.12
83.5	278.0	5421.77	5424.22	5422.87	5424.24	0.000253	1.10	252.06	151.69	0.15			1.10	2.45
83.3849*	278.0	5421.42	5424.19	5422.86	5424.23	0.000515	1.66	167.42	92.78	0.22			1.66	2.77
83.27	278.0	5421.08	5424.00	5423.13	5424.21	0.002307	3.62	76.74	40.14	0.46			3.62	2.92
83	278.0	5420.96	5423.94	5423.14	5424.14	0.002472	3.62	76.80	42.22	0.47			3.62	2.98
82.8825*	278.0	5420.96	5423.97	5422.98	5424.09	0.001409	2.77	100.34	54.57	0.36			2.77	3.01
82.765*	278.0	5420.96	5423.98	5422.84	5424.07	0.001029	2.33	119.08	66.37	0.31			2.33	3.02
82.6475*	278.0	5420.97	5423.98	5422.73	5424.05	0.000868	2.08	133.41	77.70	0.28			2.08	3.01
82.53	278.0	5420.97	5423.98	5422.64	5424.04	0.000712	1.93	143.96	80.97	0.26			1.93	3.01
82.3999*	278.0	5420.95	5423.96	5422.62	5424.03	0.000700	2.10	132.53	64.77	0.26			2.10	3.01
82.27	278.0	5420.93	5423.88	5422.71	5424.01	0.001282	2.93	94.81	42.95	0.35			2.93	2.95
82.1349*	278.0	5421.01	5423.79	5422.90	5423.98	0.002074	3.49	79.73	40.27	0.44			3.49	2.78
82	278.0	5421.09	5423.63	5423.11	5423.93	0.004151	4.44	62.67	37.36	0.60			4.44	2.54

Profile Output Table - No Name Arroyo Reconstructed Channel 10yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	278.0	5421.00	5423.54	5423.13	5423.87	0.004912	4.59	60.52	39.17	0.65			4.59	2.54
81.75*	278.0	5420.92	5423.44	5423.11	5423.81	0.005942	4.83	57.59	40.00	0.71			4.83	2.52
81.625*	278.0	5420.83	5423.34	5423.06	5423.73	0.006731	5.01	55.53	40.00	0.75			5.01	2.51
81.5	278.0	5420.75	5423.08	5423.01	5423.61	0.010679	5.83	47.65	38.50	0.92			5.83	2.33
81.25	278.0	5420.52	5422.79	5422.79	5423.32	0.012644	5.85	47.50	44.48	0.99			5.85	2.27
81.125*	278.0	5420.39	5422.39	5422.54	5423.11	0.020215	6.78	41.02	42.96	1.22			6.78	2.00
81	278.0	5420.26	5422.71	5422.33	5422.95	0.005377	3.98	69.93	60.43	0.65			3.98	2.45
80.875*	278.0	5420.13	5422.62	5422.20	5422.88	0.004761	4.16	66.76	49.05	0.63			4.16	2.49
80.75	278.0	5420.01	5422.51	5422.09	5422.82	0.004915	4.45	62.51	42.35	0.65			4.45	2.50
80.5	278.0	5419.78	5422.13	5422.04	5422.63	0.009781	5.70	48.76	38.07	0.89			5.70	2.35
80.25*	278.0	5419.54	5421.89	5421.80	5422.39	0.009728	5.69	48.86	38.10	0.89			5.69	2.35
80	278.0	5419.29	5421.64	5421.55	5422.14	0.009738	5.69	48.83	38.07	0.89			5.69	2.35
79.775*	278.0	5419.07	5421.42	5421.31	5421.92	0.009760	5.70	48.79	38.07	0.89			5.70	2.35
79.55	278.0	5418.85	5421.19	5421.09	5421.70	0.009967	5.74	48.47	38.03	0.90			5.74	2.34
79.465*	278.0	5418.77	5421.11	5421.02	5421.62	0.009977	5.73	48.51	38.15	0.90			5.73	2.34
79.38*	278.0	5418.69	5421.03	5420.93	5421.53	0.009807	5.69	48.83	38.30	0.89			5.69	2.34
79.295*	278.0	5418.60	5420.95	5420.86	5421.45	0.009737	5.67	49.00	38.44	0.89			5.67	2.35
79.21*	278.0	5418.52	5420.87	5420.77	5421.36	0.009610	5.64	49.28	38.59	0.88			5.64	2.35
79.125*	278.0	5418.44	5420.79	5420.68	5421.28	0.009291	5.57	49.87	38.78	0.87			5.57	2.35
79.04	278.0	5418.36	5420.72	5420.58	5421.19	0.009111	5.53	50.25	38.96	0.86			5.53	2.36
78.77	278.0	5418.10	5420.45	5420.34	5420.95	0.009421	5.62	49.44	38.33	0.87			5.62	2.35
78.5	278.0	5417.83	5420.20	5420.09	5420.69	0.009258	5.60	49.64	38.20	0.87			5.60	2.37
78.375*	278.0	5417.71	5420.07	5419.95	5420.57	0.009680	5.70	48.77	37.83	0.88			5.70	2.36
78.25*	278.0	5417.58	5419.94	5419.82	5420.45	0.009954	5.74	48.46	38.06	0.90			5.74	2.36
78.125*	278.0	5417.46	5419.80	5419.71	5420.32	0.010150	5.77	48.18	38.06	0.90			5.77	2.34
78	278.0	5417.34	5419.69	5419.57	5420.19	0.009730	5.69	48.84	38.07	0.89			5.69	2.35
77.7966*	278.0	5417.14	5419.49	5419.37	5419.99	0.009860	5.71	48.66	38.12	0.89			5.71	2.35
77.5933*	278.0	5416.94	5419.28	5419.17	5419.79	0.009960	5.73	48.51	38.32	0.90	0.15		5.73	2.34
77.39	278.0	5416.74	5419.10	5418.98	5419.59	0.009171	5.65	50.98	48.09	0.87	1.05		5.45	2.36
77.2666*	278.0	5416.62	5418.98	5418.86	5419.48	0.009715	5.68	48.95	38.37	0.89	0.07		5.68	2.36
77.1433*	278.0	5416.50	5418.86	5418.74	5419.36	0.009699	5.68	48.94	38.21	0.88			5.68	2.36
77.02*	278.0	5416.38	5418.74	5418.61	5419.24	0.009678	5.68	48.93	38.12	0.88			5.68	2.36
76.8966*	278.0	5416.26	5418.61	5418.50	5419.12	0.009770	5.70	48.74	38.01	0.89			5.70	2.35
76.7733*	278.0	5416.14	5418.49	5418.38	5419.00	0.009766	5.71	48.69	37.89	0.89			5.71	2.35
76.65	278.0	5416.02	5418.37	5418.25	5418.88	0.009673	5.70	48.80	37.81	0.88			5.70	2.35
76.4666*	278.0	5415.84	5418.20	5418.07	5418.69	0.009438	5.64	49.26	38.01	0.87			5.64	2.36
76.2833*	278.0	5415.66	5418.02	5417.89	5418.52	0.009475	5.65	49.23	38.08	0.88			5.65	2.36
76.1	278.0	5415.48	5417.74	5417.72	5418.32	0.011976	6.09	45.64	37.58	0.97			6.09	2.26
75.984*	278.0	5415.36	5417.62	5417.58	5418.17	0.011631	5.98	46.49	38.53	0.96			5.98	2.26
75.868*	278.0	5415.25	5417.49	5417.44	5418.03	0.011360	5.88	47.25	39.46	0.95			5.88	2.24
75.752*	278.0	5415.13	5417.40	5417.31	5417.89	0.010222	5.64	49.30	40.57	0.90			5.64	2.27
75.6359*	278.0	5415.02	5417.32	5417.17	5417.77	0.009021	5.37	51.78	41.80	0.85			5.37	2.30
75.52	278.0	5414.90	5417.29	5417.04	5417.65	0.006574	4.89	59.72	51.06	0.74	1.44		4.66	2.39
75.3466*	278.0	5414.74	5417.16	5416.92	5417.53	0.006592	4.95	58.62	49.71	0.74	1.31		4.74	2.41
75.1733*	278.0	5414.57	5417.01	5416.77	5417.41	0.006805	5.07	56.94	48.15	0.75	1.17		4.88	2.44
75	278.0	5414.41	5416.75	5416.65	5417.26	0.009651	5.73	49.34	43.49	0.88	0.95		5.63	2.34
74.8*	278.0	5414.21	5416.56	5416.44	5417.06	0.009369	5.68	49.69	42.23	0.87	1.02		5.59	2.35
74.6*	278.0	5414.01	5416.41	5416.24	5416.87	0.008239	5.45	51.86	42.17	0.82	1.11		5.36	2.40
74.4	278.0	5413.81	5416.30	5416.05	5416.71	0.006770	5.12	55.36	42.56	0.75	1.17		5.02	2.49
74.2*	278.0	5413.62	5416.22	5415.85	5416.57	0.005549	4.72	58.89	39.85	0.68			4.72	2.60
74	278.0	5413.43	5416.16	5415.66	5416.45	0.004261	4.33	64.23	40.59	0.61			4.33	2.73
73.9166*	278.0	5413.34	5416.15	5415.59	5416.41	0.003680	4.11	67.57	41.27	0.57			4.11	2.81
73.8333*	278.0	5413.26	5416.13	5415.49	5416.37	0.003222	3.93	70.77	41.93	0.53			3.93	2.87
73.75	278.0	5413.17	5416.12	5415.41	5416.34	0.002790	3.74	74.40	48.08	0.50			3.74	2.95
73.5	278.0	5412.92	5416.09	5415.16	5416.27	0.002030	3.37	82.39	54.03	0.43			3.37	3.17
73.375*	278.0	5412.80	5416.08	5415.09	5416.24	0.001816	3.25	85.49	47.28	0.41			3.25	3.28
73.25	278.0	5412.68	5416.08	5414.93	5416.21	0.001317	2.95	99.92	56.89	0.35	0.22	0.86	2.78	3.40
73	278.0	5412.44	5416.06	5414.66	5416.18	0.000976	2.70	106.64	52.32	0.31	0.67		2.61	3.62
72.77	278.0	5412.20	5416.06	5414.43	5416.15	0.000841	2.34	118.92	56.11	0.28			2.34	3.86
72.615*	278.0	5412.05	5416.06	5414.19	5416.13	0.000543	2.08	133.60	54.08	0.23			2.08	4.01
72.46	278.0	5411.90	5416.07	5413.94	5416.12	0.000380	1.86	149.82	56.58	0.20			1.86	4.17
72.23	278.0	5411.77	5415.95	5414.34	5416.10	0.001393	3.07	90.49	46.29	0.36			3.07	4.18
72.1150*	278.0	5411.79	5415.82	5414.65	5416.07	0.002712	3.94	70.47	36.04	0.50			3.94	4.03
72	278.0	5411.82	5415.51	5415.15	5416.00	0.006432	5.62	49.48	27.98	0.74			5.62	3.69
71.78	278.0	5411.71	5415.25	5415.10	5415.82	0.009856	6.05	45.98	32.43	0.89			6.05	3.54
71.6866*	278.0	5411.68	5415.24	5414.96	5415.70	0.009340	5.45	50.97	40.71	0.86			5.45	3.56
71.5933*	278.0	5411.66	5415.22	5415.02	5415.59	0.008129	4.84	57.41	49.51	0.79			4.84	3.56
71.5	278.0	5411.63	5414.75	5414.75	5415.47	0.012222	6.80	40.90	38.73	0.99			6.80	3.12
71.375*	278.0	5411.47	5413.99	5414.38	5415.19	0.024941	8.79	31.63	25.58	1.39			8.79	2.52
71.25*	278.0	5411.31	5413.51	5413.91	5414.79	0.037472	9.07	30.67	32.73	1.65			9.07	2.20
71.125*	278.0	5411.15	5413.15	5413.49	5414.33	0.031437	8.74	31.83	31.65	1.54			8.74	2.00

Profile Output Table - No Name Arroyo Reconstructed Channel 10yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71	278.0	5410.99	5412.81	5413.11	5413.97	0.026499	8.67	32.05	27.80	1.42			8.67	1.82
70.875*	278.0	5410.89	5413.19	5413.14	5413.80	0.011188	6.25	44.48	33.47	0.96			6.25	2.30
70.75	278.0	5410.79	5413.09	5413.02	5413.64	0.010650	5.94	46.86	37.88	0.93	0.59		5.93	2.30
70.6166*	278.0	5410.69	5412.97	5412.89	5413.49	0.010516	5.80	47.92	38.63	0.92			5.80	2.28
70.4833*	278.0	5410.58	5412.94	5412.76	5413.32	0.008112	4.97	55.92	46.89	0.80			4.97	2.36
70.35	278.0	5410.48	5413.01	5412.42	5413.19	0.002806	3.43	81.83	55.96	0.49		0.82	3.40	2.53
70.175*	278.0	5410.35	5412.86	5412.46	5413.12	0.004859	4.12	67.47	51.17	0.63			4.12	2.51
70	278.0	5410.22	5412.77	5412.37	5413.03	0.004944	4.15	66.96	50.72	0.64			4.15	2.55
69.75*	278.0	5410.04	5412.60	5412.23	5412.90	0.005342	4.42	62.86	45.82	0.67			4.42	2.56
69.5	278.0	5409.85	5412.35	5412.08	5412.74	0.006618	5.06	55.41	41.16	0.74	0.86		5.02	2.50
69.3333*	278.0	5409.72	5412.25	5411.95	5412.63	0.006400	4.96	56.12	39.83	0.73	0.25		4.95	2.53
69.1666*	278.0	5409.59	5412.16	5411.82	5412.52	0.006010	4.84	57.48	39.83	0.71			4.84	2.57
69	278.0	5409.46	5412.07	5411.69	5412.42	0.005553	4.71	59.02	40.10	0.68			4.71	2.61
68.75*	278.0	5409.27	5411.97	5411.52	5412.28	0.004576	4.43	62.72	40.35	0.63			4.43	2.70
68.5	278.0	5409.08	5411.90	5411.33	5412.16	0.003643	4.11	67.58	49.04	0.56			4.11	2.82
68.375*	278.0	5408.98	5411.87	5411.23	5412.11	0.003228	3.95	70.35	52.34	0.53			3.95	2.89
68.25	278.0	5408.88	5411.85	5411.10	5412.07	0.002845	3.79	73.38	55.61	0.50			3.79	2.97
68.13	278.0	5408.78	5411.91	5410.94	5412.01	0.001246	2.70	115.85	64.68	0.34	1.43		2.40	3.13
67.99	278.0	5408.64	5411.92	5410.32	5411.98	0.000582	2.05	135.47	59.29	0.24			2.05	3.28
67.89*	278.0	5408.58	5411.90	5410.48	5411.98	0.000768	2.22	125.03	59.83	0.27			2.22	3.32
67.79	278.0	5408.51	5411.89	5410.59	5411.97	0.000874	2.31	120.48	60.00	0.29			2.31	3.38
67.65	278.0	5408.41	5411.82	5410.63	5411.95	0.001321	2.85	97.54	47.96	0.35			2.85	3.41
67.4	278.0	5408.21	5411.79	5410.46	5411.92	0.001268	2.82	98.72	47.82	0.35			2.82	3.58
67.2*	278.0	5407.99	5411.72	5410.40	5411.88	0.001640	3.20	86.82	42.02	0.39			3.20	3.73
67	278.0	5407.77	5411.52	5410.81	5411.82	0.003815	4.43	62.82	34.97	0.58			4.43	3.75
66.75*	278.0	5407.70	5411.42	5410.75	5411.73	0.003643	4.46	62.32	33.24	0.57			4.46	3.72
66.5	278.0	5407.63	5411.31	5410.59	5411.64	0.003761	4.61	60.25	31.21	0.59			4.61	3.68
66.255*	278.0	5407.58	5411.13	5410.55	5411.53	0.004618	5.07	54.80	28.58	0.65			5.07	3.55
66.01	278.0	5407.52	5410.86	5410.58	5411.38	0.007410	5.80	47.95	28.28	0.78			5.80	3.34
65.84*	278.0	5407.39	5410.52	5410.38	5411.22	0.009686	6.72	41.38	24.44	0.91			6.72	3.13
65.67*	278.0	5407.25	5410.43	5410.18	5411.05	0.007971	6.32	44.01	24.89	0.84			6.32	3.18
65.5	278.0	5407.12	5410.42	5409.99	5410.88	0.005691	5.46	50.93	27.95	0.71			5.46	3.30
65.25*	278.0	5406.85	5410.33	5409.81	5410.73	0.005174	5.04	55.19	31.85	0.67			5.04	3.48
65	278.0	5406.58	5409.86	5409.80	5410.52	0.010832	6.53	42.55	28.60	0.94			6.53	3.28
64.8*	278.0	5406.58	5409.77	5409.48	5410.30	0.007425	5.84	47.64	28.88	0.80			5.84	3.19
64.6*	278.0	5406.58	5409.68	5409.25	5410.15	0.006049	5.49	50.64	28.89	0.73			5.49	3.10
64.4	278.0	5406.58	5409.57	5409.05	5410.02	0.005583	5.38	51.70	28.49	0.70			5.38	2.99
64.175*	278.0	5406.38	5409.55	5409.03	5409.86	0.004788	4.47	62.22	40.76	0.64			4.47	3.17
63.95	278.0	5406.17	5409.55	5409.02	5409.74	0.003387	3.49	79.66	58.02	0.52			3.49	3.38
63.7633*	278.0	5405.99	5409.42	5408.93	5409.66	0.004342	3.91	71.14	53.10	0.59			3.91	3.43
63.5766*	278.0	5405.81	5409.29	5408.79	5409.57	0.004891	4.27	65.06	46.67	0.64			4.27	3.48
63.39	278.0	5405.63	5409.14	5408.69	5409.47	0.005462	4.61	60.31	42.00	0.68			4.61	3.51
63.2066*	278.0	5405.46	5409.11	5408.49	5409.36	0.003755	4.02	69.13	44.61	0.57			4.02	3.65
63.0233*	278.0	5405.30	5409.11	5408.18	5409.28	0.002170	3.36	82.75	46.22	0.44			3.36	3.81
62.84	278.0	5405.13	5409.11	5407.77	5409.24	0.001195	2.81	98.87	45.76	0.34			2.81	3.98
62.6	278.0	5405.13	5409.11	5407.60	5409.20	0.000810	2.42	115.02	50.08	0.28			2.42	3.98
62.475*	278.0	5405.13	5409.03	5407.90	5409.18	0.001629	3.15	88.31	43.78	0.39			3.15	3.90
62.35	278.0	5405.13	5408.88	5407.96	5409.15	0.002799	4.16	66.86	31.88	0.51			4.16	3.75
62.175*	278.0	5405.10	5408.78	5408.10	5409.09	0.003812	4.46	62.28	34.29	0.58			4.46	3.68
62	278.0	5405.08	5408.63	5408.03	5409.00	0.005325	4.88	56.95	35.19	0.68			4.88	3.55
61.75*	278.0	5405.03	5408.26	5408.04	5408.82	0.008283	5.98	46.47	29.56	0.84			5.98	3.23
61.5	278.0	5404.98	5408.12	5407.76	5408.62	0.006352	5.65	49.22	27.75	0.75			5.65	3.14
61.25*	278.0	5404.82	5407.99	5407.65	5408.44	0.006512	5.42	51.27	31.72	0.75			5.42	3.17
61	278.0	5404.66	5407.96	5407.38	5408.26	0.004107	4.37	63.55	38.56	0.60			4.37	3.30
60.75*	278.0	5404.53	5407.92	5407.12	5408.16	0.002779	3.90	71.35	38.42	0.50			3.90	3.39
60.5	278.0	5404.39	5407.88	5406.92	5408.09	0.002245	3.69	75.25	37.16	0.46			3.69	3.48
60.25*	278.0	5404.26	5407.73	5406.93	5408.02	0.003138	4.27	65.13	33.29	0.54			4.27	3.47
60	278.0	5404.13	5407.52	5406.89	5407.91	0.004374	5.02	55.34	28.20	0.63			5.02	3.39
59.75*	278.0	5404.00	5407.45	5406.74	5407.80	0.003919	4.74	58.65	30.06	0.60			4.74	3.45
59.5	278.0	5403.88	5407.32	5406.68	5407.69	0.004373	4.90	56.72	29.73	0.63			4.90	3.44
59.25*	278.0	5403.84	5407.17	5406.68	5407.57	0.005119	5.08	54.69	30.98	0.67			5.08	3.33
59	278.0	5403.80	5407.04	5406.63	5407.44	0.005655	5.12	54.29	32.69	0.70			5.12	3.23
58.82*	278.0	5403.67	5406.97	5406.48	5407.34	0.004722	4.84	57.40	32.96	0.65			4.84	3.30
58.64*	278.0	5403.54	5406.92	5406.26	5407.25	0.003955	4.63	60.04	38.12	0.60			4.63	3.38
58.46	278.0	5403.41	5406.86	5406.11	5407.18	0.003436	4.50	61.82	39.86	0.56			4.50	3.45
58.23*	278.0	5403.30	5406.78	5406.02	5407.10	0.003479	4.51	61.68	41.53	0.57			4.51	3.48
58	278.0	5403.19	5406.68	5405.92	5407.01	0.003711	4.63	60.09	43.95	0.58			4.63	3.49
57.8825*	278.0	5403.17	5406.65	5405.89	5406.96	0.003516	4.51	61.67	41.83	0.57			4.51	3.48
57.765*	278.0	5403.16	5406.61	5405.77	5406.92	0.003298	4.42	62.85	55.15	0.55			4.42	3.45
57.6475*	278.0	5403.14	5406.58	5405.81	5406.88	0.003175	4.39	63.29	69.49	0.54			4.39	3.44
57.53	278.0	5403.12	5406.54	5405.77	5406.84	0.003186	4.43	62.81	79.77	0.54			4.43	3.42

Profile Output Table - No Name Arroyo Reconstructed Channel 10yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 2

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.38	278.0	5403.07	5406.63	5405.75	5406.75	0.001266	3.27	120.28	71.03	0.36	1.39	1.14	2.31	3.56
57.23	278.0	5403.06	5406.56	5405.36	5406.73	0.001468	3.28	86.98	41.71	0.38		0.84	3.20	3.50
57	278.0	5403.03	5406.34	5405.49	5406.67	0.003335	4.56	60.98	29.28	0.56			4.56	3.31
56.75*	278.0	5402.90	5406.21	5405.45	5406.57	0.003936	4.80	57.92	29.25	0.60			4.80	3.31
56.5	278.0	5402.77	5406.09	5405.44	5406.47	0.004081	4.94	56.32	27.90	0.61			4.94	3.32
56.375*	278.0	5402.67	5406.03	5405.40	5406.42	0.004248	5.00	55.57	27.81	0.62			5.00	3.36
56.25*	278.0	5402.58	5405.95	5405.36	5406.36	0.004441	5.09	54.62	27.99	0.64		0.34	5.09	3.37
56.125*	278.0	5402.48	5405.88	5405.30	5406.30	0.004586	5.19	53.93	31.24	0.65	0.21	0.75	5.16	3.40
56	278.0	5402.38	5405.81	5405.25	5406.24	0.004519	5.24	55.85	46.28	0.65	0.57	1.06	4.98	3.43
55.875*	278.0	5402.38	5405.73	5405.20	5406.18	0.004784	5.38	53.02	42.59	0.66	0.37	0.97	5.24	3.35
55.75*	278.0	5402.38	5405.65	5405.16	5406.12	0.005049	5.51	50.93	49.28	0.68	0.29	0.87	5.46	3.27
55.625*	278.0	5402.38	5405.54	5405.10	5406.05	0.005596	5.73	48.81	69.91	0.71		0.73	5.70	3.16
55.5	278.0	5402.38	5405.39	5405.05	5405.97	0.006661	6.10	45.65	74.34	0.77		0.39	6.09	3.01
55.375*	278.0	5402.38	5405.40	5404.93	5405.86	0.005298	5.45	51.11	84.05	0.69		0.39	5.44	3.02
55.25*	278.0	5402.38	5405.39	5404.85	5405.77	0.004431	4.96	56.12	96.22	0.63		0.39	4.95	3.01
55.125*	278.0	5402.38	5405.38	5404.77	5405.71	0.003861	4.59	60.66	113.45	0.59		0.37	4.58	3.00
55	278.0	5402.38	5405.36	5404.72	5405.65	0.003439	4.29	64.93	132.71	0.56		0.36	4.28	2.98
54.875*	278.0	5402.38	5405.29	5404.71	5405.60	0.003935	4.48	62.04	130.92	0.59			4.48	2.91
54.75*	278.0	5402.38	5405.21	5404.71	5405.55	0.004501	4.71	59.06	128.76	0.63			4.71	2.83
54.625*	278.0	5402.37	5405.09	5404.70	5405.49	0.005463	5.03	55.23	124.57	0.69			5.03	2.72
54.5	278.0	5402.37	5404.85	5404.69	5405.38	0.008583	5.89	47.22	100.72	0.85			5.89	2.47
54.25*	278.0	5402.29	5404.79	5404.79	5405.15	0.005819	5.07	77.37	129.48	0.71	1.11		3.59	2.50
54	278.0	5402.20	5404.58	5404.62	5404.98	0.006909	5.46	75.14	125.54	0.77	1.29		3.70	2.38
53.8233*	278.0	5402.10	5404.34	5404.46	5404.82	0.010136	5.96	67.02	132.66	0.91	1.35		4.15	2.24
53.6466*	278.0	5402.01	5404.31	5404.30	5404.61	0.006875	4.87	90.37	166.49	0.75	1.38	0.74	3.08	2.30
53.47	278.0	5401.91	5404.32	5404.28	5404.47	0.003907	3.70	126.15	198.40	0.57	1.28	1.06	2.20	2.41
Max							8.67							
Min							1.86							
Avg							4.82							
													Avg	4.79

Only the reconstructed channel reaches were included in determining the maximum, minimum, and average velocities. The reconstructed reaches are from Station 81.50 to 72.23 and from Station 71.00 to 67.00.

Profile Output Table - No Name Arroyo Reconstructed Channel 25yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92	457.0	5430.37	5436.07	5431.98	5436.10	0.000110	1.34	340.47	79.78	0.11			1.34	5.70
91.8925*	457.0	5430.22	5436.05	5432.24	5436.09	0.000172	1.64	279.30	67.28	0.14			1.64	5.83
91.785*	457.0	5430.07	5436.02	5432.54	5436.09	0.000284	2.05	223.11	55.38	0.18			2.05	5.95
91.6775*	457.0	5429.92	5435.97	5432.86	5436.08	0.000515	2.67	171.37	43.86	0.24			2.67	6.05
91.57	457.0	5429.77	5435.85	5433.28	5436.06	0.001100	3.71	123.07	32.64	0.34			3.71	6.08
91.465*	457.0	5429.59	5435.75	5433.63	5436.04	0.001669	4.33	105.52	30.43	0.41			4.33	6.16
91.36*	457.0	5429.42	5435.60	5433.93	5436.01	0.002505	5.11	89.58	28.66	0.50	0.25		5.10	6.18
91.255*	457.0	5429.25	5435.36	5434.25	5435.95	0.003958	6.20	74.10	26.21	0.61	0.55		6.17	6.11
91.15	457.0	5429.07	5434.48	5434.48	5435.82	0.011427	9.28	49.27	18.24	0.99			9.28	5.41
91.0533*	457.0	5428.81	5433.06	5433.86	5435.52	0.028795	12.58	36.32	17.87	1.56			12.58	4.25
90.9566*	457.0	5428.55	5432.48	5433.38	5435.18	0.036758	13.19	34.65	19.48	1.74			13.19	3.92
90.86	457.0	5428.29	5432.07	5433.00	5434.80	0.039779	13.26	34.47	20.56	1.80			13.26	3.78
90.6	457.0	5427.43	5431.06	5431.99	5433.84	0.034131	13.37	34.18	31.12	1.70			13.37	3.63
90.45*	457.0	5426.88	5430.11	5431.11	5433.21	0.044769	14.15	32.30	19.36	1.93			14.15	3.23
90.3	457.0	5426.33	5429.10	5430.15	5432.46	0.052368	14.73	31.03	19.87	2.08			14.73	2.77
90.2*	457.0	5426.29	5428.49	5429.44	5431.84	0.069175	14.70	31.09	25.32	2.34			14.70	2.20
90.1*	457.0	5426.25	5428.06	5428.86	5430.98	0.077850	13.73	33.29	33.24	2.42			13.73	1.80
90	457.0	5426.21	5427.68	5428.37	5430.07	0.072734	12.42	36.79	40.66	2.30			12.42	1.46
89.875*	457.0	5425.98	5427.81	5428.23	5429.20	0.028839	9.44	48.39	40.31	1.52			9.44	1.83
89.75*	457.0	5425.75	5428.27	5428.06	5428.89	0.008076	6.33	72.19	42.00	0.85			6.33	2.52
89.625*	457.0	5425.52	5428.15	5427.93	5428.79	0.007934	6.41	71.32	40.10	0.85			6.41	2.63
89.5	457.0	5425.29	5427.81	5427.81	5428.65	0.011465	7.37	62.00	37.08	1.00			7.37	2.52
89.4166*	457.0	5425.08	5427.42	5427.63	5428.52	0.016831	8.41	54.36	35.69	1.20			8.41	2.34
89.3333*	457.0	5424.87	5427.91	5427.46	5428.40	0.005294	5.64	81.00	40.43	0.70			5.64	3.04
89.25	457.0	5424.66	5427.94	5427.22	5428.34	0.003582	5.03	90.79	39.84	0.59			5.03	3.28
89.125*	457.0	5424.40	5428.03	5427.00	5428.25	0.002035	3.77	121.26	54.52	0.45			3.77	3.63
89	457.0	5424.13	5428.04	5426.69	5428.21	0.001630	3.24	141.21	67.64	0.39			3.24	3.91
88.8266*	457.0	5423.95	5428.02	5426.84	5428.17	0.001795	3.18	143.82	76.55	0.41			3.18	4.07
88.6533*	457.0	5423.77	5427.97	5426.94	5428.14	0.002260	3.27	139.71	84.76	0.45			3.27	4.20
88.48	457.0	5423.59	5427.90	5426.89	5428.09	0.002779	3.56	128.42	80.01	0.49			3.56	4.31
88.2400*	457.0	5423.60	5427.85	5426.86	5428.03	0.001923	3.46	132.17	65.11	0.43			3.46	4.25
88	457.0	5423.60	5427.61	5426.64	5427.96	0.002807	4.76	96.03	37.95	0.53			4.76	4.01
87.875*	457.0	5423.66	5427.52	5426.70	5427.92	0.003393	5.08	89.93	37.30	0.58			5.08	3.86
87.75*	457.0	5423.72	5427.40	5426.74	5427.86	0.004199	5.47	83.53	36.51	0.64			5.47	3.68
87.625*	457.0	5423.78	5427.24	5426.75	5427.80	0.005405	5.97	76.50	35.48	0.72			5.97	3.46
87.5	457.0	5423.84	5426.85	5426.76	5427.68	0.009837	7.34	62.25	33.25	0.95			7.34	3.00
87.3333*	457.0	5423.84	5426.78	5426.57	5427.50	0.008031	6.79	67.28	34.75	0.86			6.79	2.94
87.1666*	457.0	5423.84	5426.73	5426.38	5427.35	0.006502	6.30	72.58	35.79	0.78			6.30	2.89
87	457.0	5423.84	5426.68	5426.21	5427.22	0.005405	5.89	77.54	36.57	0.71			5.89	2.84
86.74	457.0	5423.82	5426.61	5426.14	5427.07	0.004951	5.42	84.24	42.28	0.68			5.42	2.79
86.62*	457.0	5423.73	5426.64	5426.14	5426.97	0.004547	4.59	99.49	60.62	0.63			4.59	2.91
86.5	457.0	5423.64	5426.30	5426.30	5426.86	0.013229	6.00	76.11	69.19	1.01			6.00	2.66
86.3849*	457.0	5423.55	5426.22	5425.85	5426.57	0.005314	4.72	96.75	63.55	0.67			4.72	2.67
86.27	457.0	5423.47	5426.17	5425.48	5426.52	0.003446	4.70	97.14	49.59	0.57			4.70	2.70
86.1349*	457.0	5423.31	5426.03	5425.52	5426.45	0.004549	5.21	87.78	43.77	0.65			5.21	2.72
86	457.0	5423.15	5425.76	5425.52	5426.36	0.007495	6.19	73.83	41.34	0.82			6.19	2.61
85.8*	457.0	5422.90	5425.71	5425.29	5426.19	0.005468	5.55	82.32	43.06	0.71			5.55	2.81
85.6	457.0	5422.64	5425.68	5425.09	5426.07	0.004093	5.00	91.42	45.02	0.62			5.00	3.04
85.35*	457.0	5422.58	5425.57	5424.98	5425.97	0.004165	5.05	90.43	44.51	0.62			5.05	2.99
85.1*	457.0	5422.52	5425.46	5424.86	5425.86	0.004174	5.10	89.62	43.50	0.63			5.10	2.94
84.85	457.0	5422.46	5425.35	5424.76	5425.76	0.004193	5.13	89.15	43.01	0.63			5.13	2.89
84.6833*	457.0	5422.36	5425.30	5424.78	5425.68	0.004450	4.95	92.36	49.64	0.64			4.95	2.94
84.5166*	457.0	5422.27	5425.13	5424.90	5425.58	0.007015	5.39	84.86	56.88	0.78			5.39	2.86
84.35	457.0	5422.17	5424.84	5424.73	5425.43	0.009743	6.18	73.90	50.93	0.90			6.18	2.67
84.2333*	457.0	5422.17	5424.98	5424.48	5425.25	0.004310	4.17	109.60	74.85	0.61			4.17	2.81
84.1166*	457.0	5422.17	5424.96	5424.35	5425.20	0.003300	3.86	118.40	88.55	0.54			3.86	2.79
84	457.0	5422.17	5424.98	5424.20	5425.14	0.002146	3.27	139.72	92.81	0.44			3.27	2.81
83.75	457.0	5422.39	5424.87	5424.33	5425.07	0.003375	3.63	125.91	179.00	0.54			3.63	2.48
83.625*	457.0	5422.08	5424.94	5423.68	5425.01	0.000717	2.04	223.72	116.68	0.26			2.04	2.86
83.5	457.0	5421.77	5424.96	5423.14	5424.99	0.000209	1.24	368.28	160.27	0.14			1.24	3.19
83.3849*	457.0	5421.42	5424.92	5423.21	5424.98	0.000468	1.92	237.57	98.00	0.22			1.92	3.50
83.27	457.0	5421.08	5424.64	5423.65	5424.95	0.002512	4.43	103.08	42.10	0.50			4.43	3.56
83	457.0	5420.96	5424.58	5423.63	5424.88	0.002570	4.37	104.60	44.31	0.50			4.37	3.62
82.8825*	457.0	5420.96	5424.64	5423.39	5424.82	0.001414	3.32	137.80	57.08	0.38			3.32	3.68
82.765*	457.0	5420.96	5424.67	5423.27	5424.79	0.000989	2.76	165.49	69.31	0.31			2.76	3.71
82.6475*	457.0	5420.97	5424.68	5423.11	5424.77	0.000791	2.43	188.36	81.13	0.28			2.43	3.70
82.53	457.0	5420.97	5424.68	5423.00	5424.75	0.000689	2.21	206.79	92.50	0.26			2.21	3.71
82.3999*	457.0	5420.95	5424.64	5422.98	5424.74	0.000768	2.57	177.99	68.56	0.28			2.57	3.69
82.27	457.0	5420.93	5424.50	5423.14	5424.72	0.001589	3.74	122.11	44.73	0.40			3.74	3.57
82.1349*	457.0	5421.01	5424.38	5423.37	5424.68	0.002471	4.40	103.85	41.86	0.49			4.40	3.37
82	457.0	5421.09	5424.14	5423.61	5424.62	0.004843	5.57	82.01	38.67	0.67			5.57	3.05

Profile Output Table - No Name Arroyo Reconstructed Channel 25yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	457.0	5421.00	5424.05	5423.60	5424.55	0.005368	5.65	80.89	40.75	0.71			5.65	3.05
81.75*	457.0	5420.92	5423.96	5423.60	5424.48	0.006126	5.81	78.70	42.17	0.75			5.81	3.04
81.625*	457.0	5420.83	5423.84	5423.54	5424.40	0.006814	5.98	76.42	42.38	0.78			5.98	3.01
81.5	457.0	5420.75	5423.50	5423.50	5424.27	0.011748	7.06	64.73	42.12	1.00			7.06	2.75
81.25	457.0	5420.52	5423.13	5423.24	5423.94	0.014685	7.25	63.06	100.40	1.10			7.25	2.61
81.125*	457.0	5420.39	5423.30	5423.01	5423.74	0.006524	5.36	85.33	54.44	0.75			5.36	2.91
81	457.0	5420.26	5423.37	5422.76	5423.62	0.003480	4.04	113.20	68.92	0.56			4.04	3.11
80.875*	457.0	5420.13	5423.24	5422.64	5423.57	0.004003	4.59	99.57	55.44	0.60			4.59	3.11
80.75	457.0	5420.01	5423.08	5422.56	5423.50	0.004782	5.20	87.89	46.03	0.66			5.20	3.07
80.5	457.0	5419.78	5422.61	5422.53	5423.32	0.009775	6.75	67.72	40.94	0.92			6.75	2.83
80.25*	457.0	5419.54	5422.37	5422.28	5423.07	0.009713	6.73	67.88	40.99	0.92			6.73	2.83
80	457.0	5419.29	5422.12	5422.05	5422.83	0.009752	6.74	67.77	40.95	0.92			6.74	2.83
79.775*	457.0	5419.07	5421.90	5421.83	5422.61	0.009799	6.75	67.67	40.95	0.93			6.75	2.83
79.55	457.0	5418.85	5421.67	5421.61	5422.39	0.009940	6.78	67.37	40.93	0.93			6.78	2.82
79.465*	457.0	5418.77	5421.59	5421.52	5422.30	0.009893	6.76	67.56	41.08	0.93			6.76	2.82
79.38*	457.0	5418.69	5421.51	5421.43	5422.21	0.009706	6.72	68.05	41.24	0.92			6.72	2.82
79.295*	457.0	5418.60	5421.43	5421.34	5422.13	0.009592	6.68	68.40	41.40	0.92			6.68	2.83
79.21*	457.0	5418.52	5421.36	5421.24	5422.04	0.009428	6.64	68.87	41.58	0.91			6.64	2.84
79.125*	457.0	5418.44	5421.28	5421.14	5421.95	0.009134	6.56	69.66	41.79	0.90			6.56	2.84
79.04	457.0	5418.36	5421.21	5421.09	5421.87	0.008941	6.51	70.23	41.98	0.89			6.51	2.85
78.77	457.0	5418.10	5420.94	5420.82	5421.63	0.009295	6.63	68.97	41.29	0.90			6.63	2.84
78.5	457.0	5417.83	5420.70	5420.58	5421.37	0.009062	6.58	69.44	41.18	0.89			6.58	2.87
78.375*	457.0	5417.71	5420.57	5420.44	5421.26	0.009379	6.65	68.69	41.18	0.91			6.65	2.86
78.25*	457.0	5417.58	5420.45	5420.32	5421.13	0.009345	6.65	68.74	41.18	0.91			6.65	2.87
78.125*	457.0	5417.46	5420.30	5420.20	5421.01	0.009839	6.76	67.58	41.00	0.93			6.76	2.83
78	457.0	5417.34	5420.19	5420.06	5420.88	0.009417	6.67	68.56	41.06	0.91			6.67	2.85
77.7966*	457.0	5417.14	5419.96	5419.86	5420.67	0.009790	6.76	67.60	41.51	0.93	0.26		6.76	2.82
77.5933*	457.0	5416.94	5419.78	5419.68	5420.47	0.009156	6.70	70.17	50.17	0.90	1.14		6.51	2.84
77.39	457.0	5416.74	5419.75	5419.51	5420.26	0.006160	5.87	87.44	62.44	0.75	1.82		5.23	3.01
77.2666*	457.0	5416.62	5419.48	5419.35	5420.16	0.008893	6.63	70.55	49.59	0.89	1.05		6.48	2.86
77.1433*	457.0	5416.50	5419.37	5419.24	5420.04	0.009159	6.61	69.18	41.61	0.90	0.21		6.61	2.87
77.02*	457.0	5416.38	5419.24	5419.11	5419.92	0.009284	6.64	68.87	41.11	0.90			6.64	2.86
76.8966*	457.0	5416.26	5419.12	5418.99	5419.81	0.009310	6.65	68.73	40.97	0.90			6.65	2.86
76.7733*	457.0	5416.14	5419.00	5418.87	5419.69	0.009339	6.66	68.57	40.81	0.91			6.66	2.86
76.65	457.0	5416.02	5418.85	5418.74	5419.56	0.009661	6.75	67.72	40.56	0.92			6.75	2.83
76.4666*	457.0	5415.84	5418.69	5418.56	5419.38	0.009389	6.67	68.50	40.85	0.91			6.67	2.85
76.2833*	457.0	5415.66	5418.52	5418.38	5419.20	0.009243	6.63	68.93	41.03	0.90			6.63	2.86
76.1	457.0	5415.48	5418.23	5418.23	5419.01	0.011273	7.08	64.59	40.49	0.99			7.08	2.75
75.984*	457.0	5415.36	5417.98	5418.05	5418.86	0.013829	7.51	60.84	40.71	1.08			7.51	2.62
75.868*	457.0	5415.25	5417.83	5417.92	5418.71	0.014090	7.50	60.95	41.52	1.09			7.50	2.58
75.752*	457.0	5415.13	5417.69	5417.77	5418.55	0.014183	7.46	61.28	42.33	1.09			7.46	2.56
75.6359*	457.0	5415.02	5417.78	5417.63	5418.41	0.008735	6.37	72.41	48.16	0.88	0.95		6.31	2.76
75.52	457.0	5414.90	5417.80	5417.50	5418.28	0.005967	5.64	88.28	59.29	0.74	1.92		5.18	2.90
75.3466*	457.0	5414.74	5417.67	5417.38	5418.17	0.006072	5.74	86.81	58.91	0.74	1.83		5.26	2.93
75.1733*	457.0	5414.57	5417.52	5417.27	5418.05	0.006449	5.92	84.08	58.44	0.77	1.74		5.44	2.95
75	457.0	5414.41	5417.27	5417.17	5417.92	0.008342	6.52	75.45	55.82	0.86	1.69		6.06	2.86
74.8*	457.0	5414.21	5417.15	5416.95	5417.75	0.007379	6.28	77.44	52.33	0.82	1.72		5.90	2.94
74.6*	457.0	5414.01	5417.07	5416.74	5417.59	0.006032	5.88	82.35	51.20	0.75	1.72		5.55	3.06
74.4	457.0	5413.81	5417.01	5416.57	5417.46	0.004841	5.48	88.35	50.91	0.68	1.70		5.17	3.20
74.2*	457.0	5413.62	5416.95	5416.37	5417.36	0.004249	5.09	89.78	44.28	0.63			5.09	3.33
74	457.0	5413.43	5416.92	5416.17	5417.26	0.003417	4.73	96.61	45.14	0.57			4.73	3.48
73.9166*	457.0	5413.34	5416.91	5416.08	5417.23	0.003035	4.54	100.76	45.88	0.54			4.54	3.57
73.8333*	457.0	5413.26	5416.90	5416.00	5417.20	0.002726	4.36	104.73	46.62	0.51			4.36	3.64
73.75	457.0	5413.17	5416.90	5415.88	5417.17	0.002430	4.19	109.10	75.35	0.49			4.19	3.72
73.5	457.0	5412.92	5416.87	5415.67	5417.10	0.001919	3.88	117.80	69.79	0.44			3.88	3.95
73.375*	457.0	5412.80	5416.85	5415.59	5417.07	0.001750	3.76	122.15	59.36	0.42		0.46	3.74	4.05
73.25	457.0	5412.68	5416.87	5415.41	5417.04	0.001164	3.42	148.29	65.15	0.35	0.68	1.34	3.08	4.19
73	457.0	5412.44	5416.85	5415.17	5417.01	0.001001	3.25	151.00	60.60	0.33	0.97		3.03	4.41
72.77	457.0	5412.20	5416.86	5414.94	5416.98	0.000812	2.75	168.74	68.14	0.29	0.49		2.71	4.66
72.615*	457.0	5412.05	5416.86	5414.66	5416.96	0.000640	2.55	179.12	60.28	0.26			2.55	4.81
72.46	457.0	5411.90	5416.86	5414.40	5416.95	0.000475	2.34	195.63	65.69	0.23			2.34	4.96
72.23	457.0	5411.77	5416.75	5414.96	5416.92	0.001661	3.32	137.85	63.36	0.40			3.32	4.98
72.1150*	457.0	5411.79	5416.58	5415.46	5416.88	0.002844	4.46	102.53	45.17	0.52			4.46	4.79
72	457.0	5411.82	5415.93	5415.79	5416.78	0.009146	7.40	61.77	29.98	0.91			7.40	4.11
71.78	457.0	5411.71	5415.79	5415.79	5416.52	0.011812	6.83	66.93	45.47	0.99			6.83	4.08
71.6866*	457.0	5411.68	5415.42	5415.63	5416.36	0.018116	7.78	58.75	45.39	1.20			7.78	3.74
71.5933*	457.0	5411.66	5415.40	5415.47	5416.14	0.014399	6.90	66.22	51.54	1.07			6.90	3.74
71.5	457.0	5411.63	5415.20	5415.32	5415.99	0.017335	7.13	64.08	54.15	1.16			7.13	3.57
71.375*	457.0	5411.47	5414.52	5414.81	5415.68	0.026235	8.64	52.88	46.11	1.42			8.64	3.05
71.25*	457.0	5411.31	5414.04	5414.38	5415.34	0.026181	9.16	49.90	40.08	1.45			9.16	2.73
71.125*	457.0	5411.15	5413.65	5414.00	5415.02	0.024194	9.40	48.61	35.36	1.41			9.40	2.50

Profile Output Table - No Name Arroyo Reconstructed Channel 25yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71	457.0	5410.99	5413.43	5413.70	5414.72	0.018388	9.14	50.00	30.10	1.25			9.14	2.43
70.875*	457.0	5410.89	5413.69	5413.69	5414.53	0.011113	7.35	62.56	39.50	0.99	1.00		7.31	2.80
70.75	457.0	5410.79	5413.39	5413.52	5414.36	0.014826	7.92	58.39	41.38	1.13	1.45		7.83	2.59
70.6166*	457.0	5410.69	5413.28	5413.37	5414.17	0.014286	7.57	60.35	41.00	1.10			7.57	2.59
70.4833*	457.0	5410.58	5413.51	5413.18	5413.98	0.006357	5.45	83.89	50.97	0.75			5.45	2.93
70.35	457.0	5410.48	5413.60	5412.80	5413.85	0.002565	4.00	116.45	60.24	0.49		1.20	3.92	3.12
70.175*	457.0	5410.35	5413.47	5412.88	5413.79	0.003964	4.56	100.11	55.78	0.60			4.56	3.12
70	457.0	5410.22	5413.40	5412.80	5413.72	0.003884	4.54	100.76	55.69	0.59			4.54	3.18
69.75*	457.0	5410.04	5413.25	5412.67	5413.61	0.004248	4.82	94.96	52.74	0.62	0.40		4.81	3.21
69.5	457.0	5409.85	5413.02	5412.57	5413.49	0.005220	5.55	85.46	49.42	0.70	1.53		5.35	3.16
69.3333*	457.0	5409.72	5412.95	5412.44	5413.39	0.005019	5.32	88.19	52.36	0.68	1.24		5.18	3.23
69.1666*	457.0	5409.59	5412.90	5412.32	5413.30	0.004582	5.07	91.59	53.90	0.65	0.92		4.99	3.31
69	457.0	5409.46	5412.84	5412.20	5413.22	0.003975	4.93	93.20	50.19	0.61	0.51		4.90	3.38
68.75*	457.0	5409.27	5412.78	5412.02	5413.11	0.003644	4.67	97.87	59.51	0.58			4.67	3.51
68.5	457.0	5409.08	5412.72	5411.81	5413.02	0.002990	4.43	103.25	62.18	0.53			4.43	3.64
68.375*	457.0	5408.98	5412.70	5411.71	5412.98	0.002737	4.26	107.27	66.37	0.51			4.26	3.72
68.25	457.0	5408.88	5412.68	5411.64	5412.94	0.002429	4.11	111.25	69.09	0.48			4.11	3.80
68.13	457.0	5408.78	5412.75	5411.43	5412.88	0.001015	3.00	173.00	70.27	0.32	1.64		2.64	3.97
67.99	457.0	5408.64	5412.77	5410.70	5412.86	0.000605	2.42	189.31	71.95	0.25	0.16		2.41	4.13
67.89*	457.0	5408.58	5412.75	5410.90	5412.85	0.000724	2.57	178.13	65.66	0.27			2.57	4.17
67.79	457.0	5408.51	5412.73	5410.99	5412.84	0.000794	2.63	174.00	66.25	0.29			2.63	4.22
67.65	457.0	5408.41	5412.66	5411.10	5412.82	0.001279	3.26	140.10	54.86	0.36			3.26	4.24
67.4	457.0	5408.21	5412.63	5410.98	5412.79	0.001209	3.25	140.61	52.87	0.35			3.25	4.41
67.2*	457.0	5407.99	5412.54	5411.06	5412.76	0.001594	3.71	123.35	46.78	0.40			3.71	4.55
67	457.0	5407.77	5412.32	5411.43	5412.70	0.003311	4.96	92.15	38.68	0.57			4.96	4.55
66.75*	457.0	5407.70	5412.22	5411.35	5412.62	0.003351	5.04	90.61	37.61	0.57			5.04	4.52
66.5	457.0	5407.63	5412.10	5411.24	5412.53	0.003636	5.25	86.99	36.06	0.60			5.25	4.47
66.255*	457.0	5407.58	5411.89	5411.24	5412.42	0.004661	5.82	78.50	33.41	0.67			5.82	4.31
66.01	457.0	5407.52	5411.62	5411.20	5412.27	0.006295	6.48	70.50	30.69	0.75			6.48	4.10
65.84*	457.0	5407.39	5411.14	5411.10	5412.11	0.010691	7.90	57.85	28.79	0.98			7.90	3.75
65.67*	457.0	5407.25	5410.99	5410.89	5411.92	0.009782	7.75	58.94	28.53	0.95			7.75	3.74
65.5	457.0	5407.12	5411.01	5410.66	5411.71	0.006584	6.72	67.96	30.09	0.79			6.72	3.89
65.25*	457.0	5406.85	5410.96	5410.47	5411.51	0.005446	5.98	76.42	35.25	0.72			5.98	4.11
65	457.0	5406.58	5410.55	5410.47	5411.31	0.009991	7.03	65.04	37.01	0.93			7.03	3.97
64.8*	457.0	5406.58	5410.42	5410.17	5411.11	0.007870	6.69	68.33	35.27	0.85			6.69	3.83
64.6*	457.0	5406.58	5410.29	5409.98	5410.95	0.007025	6.51	70.16	34.67	0.81			6.51	3.71
64.4	457.0	5406.58	5410.13	5409.81	5410.81	0.007324	6.63	68.96	34.14	0.82			6.63	3.54
64.175*	457.0	5406.38	5410.19	5409.62	5410.59	0.004568	5.06	90.35	47.46	0.65			5.06	3.81
63.95	457.0	5406.17	5410.23	5409.39	5410.45	0.002571	3.75	121.93	64.93	0.48			3.75	4.06
63.7633*	457.0	5405.99	5410.13	5409.40	5410.39	0.003114	4.10	111.43	60.29	0.53			4.10	4.14
63.5766*	457.0	5405.81	5410.02	5409.33	5410.33	0.003654	4.45	102.77	55.84	0.58			4.45	4.21
63.39	457.0	5405.63	5409.90	5409.30	5410.25	0.004031	4.74	96.43	51.30	0.61			4.74	4.27
63.2066*	457.0	5405.46	5409.88	5409.03	5410.17	0.002956	4.28	106.88	52.54	0.53			4.28	4.42
63.0233*	457.0	5405.30	5409.88	5408.69	5410.10	0.001966	3.78	120.75	52.31	0.44			3.78	4.58
62.84	457.0	5405.13	5409.88	5408.30	5410.06	0.001287	3.35	136.37	51.20	0.36			3.35	4.75
62.6	457.0	5405.13	5409.89	5408.06	5410.02	0.000913	2.94	155.67	55.28	0.31			2.94	4.76
62.475*	457.0	5405.13	5409.78	5408.44	5410.00	0.001658	3.72	122.75	47.73	0.41			3.72	4.65
62.35	457.0	5405.13	5409.54	5408.60	5409.95	0.003346	5.12	89.33	35.53	0.57			5.12	4.41
62.175*	457.0	5405.10	5409.46	5408.72	5409.89	0.003946	5.21	87.74	39.23	0.61			5.21	4.36
62	457.0	5405.08	5409.36	5408.77	5409.81	0.004648	5.38	84.99	41.01	0.66			5.38	4.28
61.75*	457.0	5405.03	5409.00	5408.69	5409.65	0.007277	6.47	70.66	36.28	0.82			6.47	3.97
61.5	457.0	5404.98	5408.82	5408.40	5409.48	0.006571	6.50	70.34	32.92	0.78			6.50	3.84
61.25*	457.0	5404.82	5408.75	5408.26	5409.29	0.005509	5.88	77.66	37.41	0.72			5.88	3.93
61	457.0	5404.66	5408.78	5407.95	5409.12	0.003305	4.69	97.51	45.26	0.56			4.69	4.12
60.75*	457.0	5404.53	5408.74	5407.65	5409.03	0.002501	4.34	105.33	44.49	0.50			4.34	4.21
60.5	457.0	5404.39	5408.69	5407.48	5408.97	0.002163	4.25	108.32	49.88	0.47	0.31		4.22	4.30
60.25*	457.0	5404.26	5408.53	5407.54	5408.90	0.003054	4.89	93.49	38.06	0.55			4.89	4.27
60	457.0	5404.13	5408.25	5407.59	5408.79	0.004701	5.89	77.62	32.83	0.67			5.89	4.12
59.75*	457.0	5404.00	5408.19	5407.41	5408.66	0.004195	5.51	82.93	35.63	0.64			5.51	4.19
59.5	457.0	5403.88	5408.04	5407.34	5408.55	0.004807	5.69	80.26	36.07	0.67			5.69	4.16
59.25*	457.0	5403.84	5407.92	5407.31	5408.43	0.004944	5.72	79.84	36.84	0.69			5.72	4.08
59	457.0	5403.80	5407.81	5407.24	5408.29	0.004827	5.58	81.91	38.47	0.67			5.58	4.01
58.82*	457.0	5403.67	5407.76	5407.06	5408.20	0.004137	5.36	85.19	39.40	0.63			5.36	4.09
58.64*	457.0	5403.54	5407.70	5406.90	5408.13	0.003733	5.23	87.32	46.20	0.60			5.23	4.16
58.46	457.0	5403.41	5407.64	5406.69	5408.06	0.003575	5.19	88.09	49.19	0.59			5.19	4.23
58.23*	457.0	5403.30	5407.56	5406.62	5407.97	0.003623	5.18	88.21	54.80	0.59			5.18	4.26
58	457.0	5403.19	5407.45	5406.60	5407.89	0.003876	5.29	86.32	56.74	0.61			5.29	4.26
57.8825*	457.0	5403.17	5407.42	5406.53	5407.83	0.003563	5.20	87.91	83.25	0.59			5.20	4.25
57.765*	457.0	5403.16	5407.38	5406.48	5407.79	0.003364	5.16	88.59	110.62	0.58			5.16	4.22
57.6475*	457.0	5403.14	5407.34	5406.41	5407.75	0.003287	5.17	88.33	118.92	0.57			5.17	4.20
57.53	457.0	5403.12	5407.52	5406.38	5407.64	0.001155	3.21	220.61	145.51	0.34	1.21		2.07	4.40

Profile Output Table - No Name Arroyo Reconstructed Channel 25yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 3

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.38	457.0	5403.07	5407.47	5406.17	5407.62	0.001078	3.65	183.12	100.62	0.35	1.66	1.39	2.50	4.40
57.23	457.0	5403.06	5407.35	5405.91	5407.59	0.001509	3.93	122.19	57.27	0.40	0.20	1.27	3.74	4.29
57	457.0	5403.03	5407.05	5406.21	5407.52	0.003926	5.47	83.60	39.72	0.62			5.47	4.02
56.75*	457.0	5402.90	5406.88	5406.20	5407.41	0.004516	5.79	78.93	33.25	0.66			5.79	3.98
56.5	457.0	5402.77	5406.68	5406.12	5407.28	0.005088	6.22	73.53	62.00	0.70	0.13	0.40	6.22	3.91
56.375*	457.0	5402.67	5406.58	5406.09	5407.21	0.005307	6.40	72.29	73.70	0.72	0.51	0.80	6.32	3.90
56.25*	457.0	5402.58	5406.48	5406.04	5407.14	0.005464	6.54	73.03	92.53	0.73	0.81	1.12	6.26	3.90
56.125*	457.0	5402.48	5406.48	5405.98	5407.05	0.004626	6.22	94.53	119.36	0.68	0.91	1.29	4.83	4.00
56	457.0	5402.38	5406.50	5406.06	5406.97	0.003707	5.76	117.37	145.59	0.61	1.06	1.31	3.89	4.12
55.875*	457.0	5402.38	5406.53	5406.22	5406.90	0.002982	5.29	140.20	163.06	0.55	1.13	1.21	3.26	4.15
55.75*	457.0	5402.38	5406.56	5405.88	5406.83	0.002314	4.77	164.87	167.28	0.49	1.19	1.09	2.77	4.18
55.625*	457.0	5402.38	5406.57	5405.82	5406.79	0.001884	4.38	187.44	175.22	0.44	1.20	1.01	2.44	4.19
55.5	457.0	5402.38	5406.58	5405.77	5406.75	0.001547	4.02	211.17	185.08	0.40	1.18	0.93	2.16	4.20
55.375*	457.0	5402.38	5405.87	5405.61	5406.66	0.006884	7.14	65.62	139.36	0.81	0.81	1.30	6.96	3.49
55.25*	457.0	5402.38	5405.91	5405.47	5406.54	0.005374	6.37	73.58	157.42	0.72	0.78	1.21	6.21	3.53
55.125*	457.0	5402.38	5405.92	5405.34	5406.44	0.004450	5.81	80.67	173.74	0.66	0.75	1.12	5.66	3.54
55	457.0	5402.38	5405.92	5405.26	5406.37	0.003805	5.36	87.31	192.21	0.61	0.71	1.05	5.23	3.54
54.875*	457.0	5402.38	5406.12	5405.28	5406.24	0.001320	3.33	233.85	205.05	0.37	1.08	0.66	1.95	3.74
54.75*	457.0	5402.38	5405.26	5405.26	5406.13	0.011024	7.48	61.06	134.92	0.99			7.48	2.88
54.625*	457.0	5402.37	5405.27	5405.27	5406.13	0.010829	7.46	61.29	145.27	0.99	0.16		7.46	2.90
54.5	457.0	5402.37	5405.32	5405.32	5405.72	0.006056	5.70	125.26	164.13	0.74	1.57		3.65	2.95
54.25*	457.0	5402.29	5405.05	5405.12	5405.55	0.007561	6.32	112.98	148.18	0.83	1.77		4.04	2.76
54	457.0	5402.20	5404.91	5404.95	5405.36	0.007130	6.25	120.81	155.13	0.80	1.91	0.59	3.78	2.71
53.8233*	457.0	5402.10	5404.60	5404.75	5405.19	0.011204	7.03	104.81	159.21	0.98	2.06	0.69	4.36	2.50
53.6466*	457.0	5402.01	5404.60	5404.58	5404.92	0.006684	5.48	141.48	189.49	0.76	1.87	1.24	3.23	2.59
53.47	457.0	5401.91	5404.61	5404.38	5404.78	0.003901	4.22	186.23	217.69	0.59	1.65	1.38	2.45	2.70
Max							9.14							
Min							2.34							
Avg							5.53							
												Avg	5.47	

Only the reconstructed channel reaches were included in determining the maximum, minimum, and average velocities. The reconstructed reaches are from Station 81.50 to 72.23 and from Station 71.00 to 67.00.

Profile Output Table - No Name Arroyo Reconstructed Channel 100yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
92	824.0	5430.37	5437.80	5432.63	5437.84	0.000110	1.62	594.21	213.67	0.12	0.26	0.32	1.39	7.43
91.8925*	824.0	5430.22	5437.78	5432.98	5437.84	0.000174	1.97	488.32	199.23	0.15	0.33	0.34	1.69	7.56
91.785*	824.0	5430.07	5437.74	5433.39	5437.83	0.000297	2.46	383.04	179.35	0.19	0.44	0.33	2.15	7.67
91.6775*	824.0	5429.92	5437.66	5433.87	5437.82	0.000551	3.22	268.24	135.33	0.26	0.59		3.07	7.74
91.57	824.0	5429.77	5437.50	5434.40	5437.80	0.001162	4.44	195.47	59.20	0.36	0.80		4.22	7.73
91.465*	824.0	5429.59	5437.39	5434.93	5437.78	0.001574	5.06	175.12	74.45	0.42	1.02		4.71	7.80
91.36*	824.0	5429.42	5437.23	5435.34	5437.74	0.002212	5.86	154.71	98.87	0.49	1.30		5.33	7.80
91.255*	824.0	5429.25	5436.98	5435.70	5437.70	0.003275	6.92	133.12	95.45	0.59	1.82		6.19	7.73
91.15	824.0	5429.07	5436.02	5436.02	5437.57	0.008586	10.09	88.35	45.95	0.91	2.35		9.33	6.95
91.0533*	824.0	5428.81	5434.14	5435.16	5437.24	0.026568	14.12	58.34	26.41	1.56			14.12	5.33
90.9566*	824.0	5428.55	5433.38	5434.54	5436.89	0.035780	15.03	54.84	28.11	1.79			15.03	4.83
90.86	824.0	5428.29	5432.86	5434.05	5436.49	0.042763	15.28	53.93	35.85	1.93			15.28	4.57
90.6	824.0	5427.43	5432.16	5433.26	5435.49	0.029108	14.66	56.22	42.15	1.64			14.66	4.72
90.45*	824.0	5426.88	5431.03	5432.30	5434.93	0.038282	15.85	51.98	39.16	1.87			15.85	4.15
90.3	824.0	5426.33	5429.95	5431.32	5434.27	0.045490	16.68	49.40	23.42	2.02			16.68	3.61
90.2*	824.0	5426.29	5429.10	5430.44	5433.70	0.064141	17.20	47.91	29.01	2.36			17.20	2.81
90.1*	824.0	5426.25	5428.50	5429.75	5432.94	0.078192	16.91	48.73	35.54	2.55			16.91	2.25
90	824.0	5426.21	5428.03	5429.09	5432.00	0.082525	15.99	51.54	42.78	2.57			15.99	1.82
89.875*	824.0	5425.98	5428.14	5429.01	5430.89	0.044033	13.30	61.96	42.33	1.94			13.30	2.16
89.75*	824.0	5425.75	5428.32	5428.86	5430.23	0.024154	11.10	74.24	42.31	1.48			11.10	2.57
89.625*	824.0	5425.52	5429.14	5428.76	5429.95	0.006598	7.22	114.15	46.49	0.81			7.22	3.62
89.5	824.0	5425.29	5428.91	5428.67	5429.84	0.007743	7.73	106.54	43.87	0.87			7.73	3.62
89.4166*	824.0	5425.08	5428.98	5428.50	5429.74	0.005791	6.98	118.05	45.55	0.76			6.98	3.90
89.3333*	824.0	5424.87	5429.02	5428.30	5429.66	0.004348	6.40	128.74	45.47	0.67			6.40	4.15
89.25	824.0	5424.66	5429.04	5428.06	5429.60	0.003431	6.02	136.94	44.06	0.60			6.02	4.38
89.125*	824.0	5424.40	5429.19	5427.70	5429.49	0.001784	4.36	189.18	61.76	0.44			4.36	4.79
89	824.0	5424.13	5429.24	5427.46	5429.44	0.001320	3.58	230.16	80.83	0.37			3.58	5.11
88.8266*	824.0	5423.95	5429.24	5427.60	5429.41	0.001229	3.34	246.97	91.88	0.36			3.34	5.29
88.6533*	824.0	5423.77	5429.23	5427.70	5429.38	0.001184	3.17	260.29	101.91	0.35			3.17	5.46
88.48	824.0	5423.59	5429.22	5427.64	5429.36	0.001201	3.06	268.97	111.60	0.35			3.06	5.62
88.2400*	824.0	5423.60	5429.10	5427.49	5429.32	0.001371	3.75	219.56	73.94	0.38			3.75	5.50
88	824.0	5423.60	5428.70	5427.51	5429.24	0.002999	5.92	139.11	41.03	0.57			5.92	5.10
87.875*	824.0	5423.66	5428.59	5427.57	5429.20	0.003516	6.25	131.80	40.62	0.61			6.25	4.93
87.75*	824.0	5423.72	5428.46	5427.62	5429.14	0.004206	6.64	124.07	40.11	0.67			6.64	4.74
87.625*	824.0	5423.78	5428.28	5427.65	5429.07	0.005197	7.14	115.48	39.40	0.73			7.14	4.50
87.5	824.0	5423.84	5427.68	5427.68	5428.94	0.010282	9.02	91.37	36.75	1.01			9.02	3.83
87.3333*	824.0	5423.84	5427.29	5427.46	5428.73	0.012724	9.63	85.53	36.74	1.11			9.63	3.45
87.1666*	824.0	5423.84	5427.08	5427.26	5428.53	0.012984	9.65	85.36	37.11	1.12			9.65	3.24
87	824.0	5423.84	5426.90	5427.08	5428.34	0.013033	9.62	85.65	37.38	1.12			9.62	3.06
86.74	824.0	5423.82	5427.11	5426.90	5428.05	0.007913	7.77	106.00	43.83	0.88			7.77	3.29
86.62*	824.0	5423.73	5427.33	5426.80	5427.85	0.004876	5.78	142.68	64.75	0.69			5.78	3.60
86.5	824.0	5423.64	5427.34	5426.86	5427.76	0.005158	5.17	159.47	89.45	0.68			5.17	3.70
86.3849*	824.0	5423.55	5427.33	5426.44	5427.69	0.002969	4.83	170.58	69.49	0.54			4.83	3.78
86.27	824.0	5423.47	5427.11	5426.23	5427.64	0.003517	5.84	141.13	65.74	0.60			5.84	3.64
86.1349*	824.0	5423.31	5426.94	5426.28	5427.58	0.004505	6.39	128.90	46.32	0.68			6.39	3.63
86	824.0	5423.15	5426.57	5426.31	5427.47	0.007431	7.61	108.33	43.75	0.85			7.61	3.42
85.8*	824.0	5422.90	5426.55	5426.05	5427.29	0.005584	6.90	119.38	45.24	0.75			6.90	3.65
85.6	824.0	5422.64	5426.54	5425.82	5427.15	0.004324	6.29	130.92	46.97	0.66			6.29	3.90
85.35*	824.0	5422.58	5426.41	5425.73	5427.04	0.004525	6.41	128.52	46.56	0.68			6.41	3.83
85.1*	824.0	5422.52	5426.25	5425.63	5426.93	0.004852	6.59	125.11	45.89	0.70			6.59	3.73
84.85	824.0	5422.46	5426.09	5425.52	5426.80	0.005220	6.78	121.57	45.07	0.73			6.78	3.63
84.6833*	824.0	5422.36	5426.08	5425.49	5426.68	0.004750	6.22	132.50	52.75	0.69			6.22	3.72
84.5166*	824.0	5422.27	5426.04	5425.55	5426.58	0.004979	5.92	139.30	62.41	0.70			5.92	3.77
84.35	824.0	5422.17	5425.98	5425.49	5426.49	0.005043	5.73	143.72	82.91	0.69			5.73	3.81
84.2333*	824.0	5422.17	5426.11	5425.07	5426.37	0.002217	4.12	200.14	84.33	0.47			4.12	3.94
84.1166*	824.0	5422.17	5426.15	5424.96	5426.33	0.001534	3.43	240.02	100.97	0.39			3.43	3.97
84	824.0	5422.17	5426.13	5424.74	5426.31	0.001361	3.45	238.51	115.24	0.38			3.45	3.95
83.75	824.0	5422.39	5426.09	5424.85	5426.28	0.001448	3.49	236.36	189.95	0.39			3.49	3.70
83.625*	824.0	5422.08	5426.15	5424.12	5426.23	0.000481	2.21	372.14	127.20	0.23			2.21	4.07
83.5	824.0	5421.77	5426.18	5423.49	5426.21	0.000169	1.45	566.79	165.97	0.14			1.45	4.41
83.3849*	824.0	5421.42	5426.12	5423.69	5426.21	0.000423	2.29	360.21	105.78	0.22			2.29	4.70
83.27	824.0	5421.08	5425.68	5424.45	5426.16	0.002718	5.56	148.32	45.29	0.54			5.56	4.60
83	824.0	5420.96	5425.62	5424.41	5426.08	0.002659	5.40	152.59	47.73	0.53			5.40	4.66
82.8825*	824.0	5420.96	5425.74	5424.05	5425.99	0.001416	4.07	202.31	61.17	0.39			4.07	4.78
82.765*	824.0	5420.96	5425.78	5423.87	5425.95	0.000955	3.36	245.25	74.10	0.33			3.36	4.82
82.6475*	824.0	5420.97	5425.80	5423.76	5425.93	0.000730	2.91	282.69	86.72	0.28			2.91	4.83
82.53	824.0	5420.97	5425.81	5423.58	5425.92	0.000606	2.61	315.16	98.98	0.26			2.61	4.84
82.3999*	824.0	5420.95	5425.74	5423.58	5425.90	0.000819	3.22	256.16	73.44	0.30			3.22	4.79
82.27	824.0	5420.93	5425.49	5423.94	5425.86	0.001967	4.91	167.84	47.55	0.46			4.91	4.56
82.1349*	824.0	5421.01	5425.31	5424.18	5425.82	0.002974	5.73	143.85	44.37	0.56			5.73	4.30
82	824.0	5421.09	5424.89	5424.43	5425.73	0.006076	7.37	111.75	40.59	0.78			7.37	3.80

Profile Output Table - No Name Arroyo Reconstructed Channel 100yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
81.875*	824.0	5421.00	5424.82	5424.40	5425.65	0.006260	7.30	112.89	43.03	0.79			7.30	3.82
81.75*	824.0	5420.92	5424.73	5424.38	5425.56	0.006681	7.32	112.51	45.06	0.82			7.32	3.81
81.625*	824.0	5420.83	5424.62	5424.33	5425.48	0.007257	7.44	110.82	46.21	0.85			7.44	3.79
81.5	824.0	5420.75	5424.29	5424.29	5425.36	0.010178	8.29	99.34	45.34	0.99			8.29	3.54
81.25	824.0	5420.52	5423.67	5423.93	5425.00	0.016424	9.27	88.88	122.70	1.22			9.27	3.15
81.125*	824.0	5420.39	5424.34	5423.71	5424.82	0.004307	5.58	147.64	64.76	0.65			5.58	3.95
81	824.0	5420.26	5424.44	5423.37	5424.72	0.002297	4.29	191.95	77.85	0.48			4.29	4.17
80.875*	824.0	5420.13	5424.27	5423.34	5424.68	0.003183	5.11	161.29	64.26	0.57			5.11	4.14
80.75	824.0	5420.01	5424.02	5423.34	5424.61	0.004535	6.17	133.62	51.91	0.68			6.17	4.01
80.5	824.0	5419.78	5423.37	5423.35	5424.41	0.009776	8.18	100.76	45.53	0.97			8.18	3.59
80.25*	824.0	5419.54	5423.13	5423.09	5424.17	0.009733	8.16	100.93	45.56	0.97			8.16	3.59
80	824.0	5419.29	5422.88	5422.84	5423.92	0.009791	8.18	100.70	45.51	0.97			8.18	3.59
79.775*	824.0	5419.07	5422.66	5422.63	5423.70	0.009824	8.19	100.65	45.58	0.97			8.19	3.59
79.55	824.0	5418.85	5422.44	5422.42	5423.48	0.009885	8.20	100.52	45.64	0.97			8.20	3.59
79.465*	824.0	5418.77	5422.36	5422.33	5423.39	0.009796	8.16	100.92	45.79	0.97			8.16	3.59
79.38*	824.0	5418.69	5422.28	5422.22	5423.30	0.009598	8.10	101.70	45.98	0.96			8.10	3.59
79.295*	824.0	5418.60	5422.21	5422.14	5423.21	0.009402	8.04	102.50	46.18	0.95			8.04	3.61
79.21*	824.0	5418.52	5422.14	5422.06	5423.13	0.009229	7.98	103.25	46.38	0.94			7.98	3.62
79.125*	824.0	5418.44	5422.07	5421.95	5423.04	0.008911	7.88	104.56	46.63	0.93			7.88	3.63
79.04	824.0	5418.36	5422.01	5421.87	5422.95	0.008665	7.80	105.66	46.87	0.92			7.80	3.65
78.77	824.0	5418.10	5421.74	5421.65	5422.72	0.009024	7.95	103.70	46.08	0.93			7.95	3.64
78.5	824.0	5417.83	5421.51	5421.39	5422.46	0.008865	7.82	105.32	47.31	0.92			7.82	3.68
78.375*	824.0	5417.71	5421.39	5421.26	5422.35	0.009032	7.88	104.63	47.25	0.93			7.88	3.68
78.25*	824.0	5417.58	5421.25	5421.13	5422.23	0.009182	7.93	103.89	47.01	0.94			7.93	3.67
78.125*	824.0	5417.46	5421.14	5421.02	5422.11	0.009054	7.90	104.24	46.88	0.93			7.90	3.68
78	824.0	5417.34	5420.89	5420.87	5421.97	0.010085	8.34	99.45	49.43	0.99	0.94		8.29	3.55
77.7966*	824.0	5417.14	5420.72	5420.72	5421.75	0.009380	8.21	104.77	57.75	0.96		1.70	7.87	3.58
77.5933*	824.0	5416.94	5420.71	5420.51	5421.51	0.006734	7.35	126.05	69.06	0.82		2.25	6.54	3.77
77.39	824.0	5416.74	5420.77	5420.24	5421.32	0.004294	6.26	160.23	82.63	0.67		2.33	5.14	4.03
77.2666*	824.0	5416.62	5420.50	5420.21	5421.23	0.005901	7.06	130.62	67.75	0.77		2.19	6.31	3.88
77.1433*	824.0	5416.50	5420.22	5420.06	5421.14	0.007722	7.72	111.28	57.06	0.87		1.65	7.40	3.72
77.02*	824.0	5416.38	5420.05	5419.91	5421.02	0.008577	7.91	104.82	49.09	0.92		0.98	7.86	3.67
76.8966*	824.0	5416.26	5419.95	5419.80	5420.91	0.008699	7.88	104.62	45.81	0.92			7.88	3.69
76.7733*	824.0	5416.14	5419.83	5419.67	5420.79	0.008612	7.86	104.82	45.66	0.91			7.86	3.69
76.65	824.0	5416.02	5419.63	5419.55	5420.67	0.009649	8.18	100.71	44.97	0.96			8.18	3.61
76.4666*	824.0	5415.84	5419.47	5419.37	5420.48	0.009339	8.07	102.11	45.45	0.95			8.07	3.63
76.2833*	824.0	5415.66	5419.31	5419.19	5420.30	0.009110	7.99	103.09	45.70	0.94			7.99	3.65
76.1	824.0	5415.48	5419.04	5419.04	5420.11	0.010169	8.29	99.42	45.98	0.99			8.29	3.56
75.984*	824.0	5415.36	5418.70	5418.85	5419.96	0.013236	9.00	91.53	45.03	1.11			9.00	3.34
75.868*	824.0	5415.25	5418.59	5418.69	5419.78	0.012490	8.77	93.98	46.10	1.08			8.77	3.34
75.752*	824.0	5415.13	5418.50	5418.54	5419.61	0.011250	8.44	97.73	48.51	1.03	0.51		8.43	3.37
75.6359*	824.0	5415.02	5418.23	5418.41	5419.45	0.012884	8.91	95.68	55.55	1.10		2.01	8.61	3.21
75.52	824.0	5414.90	5418.64	5418.22	5419.26	0.005275	6.59	143.20	72.28	0.73		2.52	5.75	3.74
75.3466*	824.0	5414.74	5418.55	5418.14	5419.17	0.005088	6.56	145.32	74.00	0.72		2.43	5.67	3.81
75.1733*	824.0	5414.57	5418.48	5418.03	5419.08	0.004839	6.50	149.05	77.11	0.70		2.33	5.53	3.91
75	824.0	5414.41	5418.42	5417.94	5419.00	0.004575	6.42	154.59	82.71	0.69		2.22	5.33	4.01
74.8*	824.0	5414.21	5418.34	5417.75	5418.91	0.004184	6.29	151.97	72.85	0.66		2.23	5.42	4.13
74.6*	824.0	5414.01	5418.29	5417.54	5418.82	0.003626	6.02	155.49	68.19	0.62		2.19	5.30	4.28
74.4	824.0	5413.81	5418.26	5417.37	5418.74	0.003103	5.73	161.35	65.71	0.58		2.14	5.11	4.45
74.2*	824.0	5413.62	5418.20	5417.16	5418.67	0.003023	5.50	150.52	55.19	0.56		0.59	5.47	4.58
74	824.0	5413.43	5418.18	5416.97	5418.60	0.002653	5.19	158.76	112.87	0.53			5.19	4.75
73.9166*	824.0	5413.34	5418.18	5416.88	5418.57	0.002442	5.01	164.46	70.26	0.51			5.01	4.84
73.8333*	824.0	5413.26	5418.18	5416.78	5418.54	0.002230	4.85	169.75	94.05	0.49			4.85	4.92
73.75	824.0	5413.17	5418.18	5416.69	5418.52	0.002023	4.71	174.84	97.69	0.47			4.71	5.01
73.5	824.0	5412.92	5418.15	5416.48	5418.46	0.001714	4.46	184.80	84.89	0.43		0.30	4.46	5.23
73.375*	824.0	5412.80	5418.17	5416.38	5418.43	0.001277	4.18	223.49	90.38	0.38	0.62	1.20	3.69	5.37
73.25	824.0	5412.68	5418.18	5416.23	5418.41	0.000988	4.02	242.63	79.18	0.34	1.12	1.79	3.40	5.50
73	824.0	5412.44	5418.16	5415.96	5418.38	0.000953	3.92	239.77	76.08	0.33	1.35	0.17	3.44	5.72
72.77	824.0	5412.20	5418.18	5415.80	5418.34	0.000711	3.27	270.15	88.88	0.29	0.90		3.05	5.98
72.615*	824.0	5412.05	5418.18	5415.45	5418.33	0.000647	3.12	269.37	79.38	0.28	0.49		3.06	6.13
72.46	824.0	5411.90	5418.18	5415.13	5418.32	0.000556	2.94	280.00	81.94	0.26			2.94	6.28
72.23	824.0	5411.77	5418.09	5416.11	5418.29	0.001183	3.57	230.86	73.49	0.35			3.57	6.32
72.1150*	824.0	5411.79	5417.89	5416.47	5418.26	0.002377	4.88	168.98	56.79	0.50			4.88	6.10
72	824.0	5411.82	5416.79	5416.79	5418.12	0.010278	9.25	89.05	33.44	1.00			9.25	4.97
71.78	824.0	5411.71	5416.06	5416.54	5417.72	0.023163	10.34	79.72	48.20	1.42			10.34	4.35
71.6866*	824.0	5411.68	5415.86	5416.31	5417.50	0.024238	10.27	80.21	50.81	1.44			10.27	4.18
71.5933*	824.0	5411.66	5415.74	5416.14	5417.23	0.022262	9.81	84.02	53.42	1.38			9.81	4.08
71.5	824.0	5411.63	5415.62	5415.97	5417.00	0.020840	9.43	87.41	55.58	1.32			9.43	3.99
71.375*	824.0	5411.47	5415.11	5415.53	5416.71	0.022164	10.13	81.34	49.01	1.39			10.13	3.64
71.25*	824.0	5411.31	5414.72	5415.15	5416.43	0.021082	10.49	78.58	43.54	1.38			10.49	3.41
71.125*	824.0	5411.15	5414.44	5414.85	5416.18	0.018296	10.58	77.91	38.02	1.30			10.58	3.29

Profile Output Table - No Name Arroyo Reconstructed Channel 100yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
71	824.0	5410.99	5414.41	5414.67	5416.01	0.013178	10.17	82.71	38.19	1.12	1.69		9.96	3.42
70.875*	824.0	5410.89	5414.13	5414.55	5415.81	0.017685	10.45	81.03	45.81	1.29	2.27		10.17	3.23
70.75	824.0	5410.79	5413.95	5414.36	5415.56	0.017290	10.26	83.62	48.17	1.27	2.72		9.85	3.16
70.6166*	824.0	5410.69	5413.93	5414.18	5415.27	0.014903	9.32	89.82	50.80	1.18	1.89		9.17	3.24
70.4833*	824.0	5410.58	5414.49	5413.89	5415.05	0.004425	6.00	140.22	64.12	0.67	1.28	0.61	5.88	3.91
70.35	824.0	5410.48	5414.59	5413.48	5414.94	0.002203	4.78	180.77	70.52	0.49	0.74	1.66	4.56	4.11
70.175*	824.0	5410.35	5414.48	5413.55	5414.89	0.003105	5.12	161.71	67.38	0.56	0.62		5.10	4.13
70	824.0	5410.22	5414.43	5413.48	5414.83	0.003017	5.08	162.61	67.11	0.56	0.38		5.07	4.21
69.75*	824.0	5410.04	5414.32	5413.43	5414.75	0.003239	5.31	160.94	70.51	0.58	1.39		5.12	4.28
69.5	824.0	5409.85	5414.22	5413.50	5414.67	0.003790	5.47	162.58	76.23	0.62	2.18		5.07	4.37
69.3333*	824.0	5409.72	5414.18	5413.30	5414.60	0.003183	5.28	168.50	75.60	0.57	1.87		4.89	4.46
69.1666*	824.0	5409.59	5414.14	5413.14	5414.55	0.002771	5.22	170.65	73.24	0.54	1.61		4.83	4.55
69	824.0	5409.46	5414.08	5413.00	5414.50	0.002607	5.30	167.76	70.15	0.53	1.41		4.91	4.62
68.75*	824.0	5409.27	5414.11	5412.85	5414.40	0.002028	4.47	202.87	84.81	0.46	1.64		4.06	4.84
68.5	824.0	5409.08	5414.03	5412.67	5414.35	0.002420	4.53	181.91	93.24	0.50			4.53	4.95
68.375*	824.0	5408.98	5414.08	5412.57	5414.29	0.001502	3.86	237.33	89.11	0.40	1.98		3.47	5.10
68.25	824.0	5408.88	5414.07	5412.46	5414.27	0.001234	3.73	249.15	84.50	0.37	1.99		3.31	5.19
68.13	824.0	5408.78	5414.08	5411.92	5414.24	0.000876	3.48	272.15	79.26	0.32	1.93		3.03	5.30
67.99	824.0	5408.64	5414.09	5411.42	5414.22	0.000561	2.90	295.42	85.84	0.26	0.79		2.79	5.45
67.89*	824.0	5408.58	5414.07	5411.59	5414.22	0.000693	3.04	271.23	74.82	0.28			3.04	5.49
67.79	824.0	5408.51	5414.06	5411.66	5414.21	0.000735	3.06	269.01	76.60	0.29			3.06	5.55
67.65	824.0	5408.41	5413.97	5411.88	5414.19	0.001203	3.73	221.16	67.73	0.36			3.73	5.56
67.4	824.0	5408.21	5413.93	5411.85	5414.16	0.001160	3.84	214.66	60.78	0.36			3.84	5.72
67.2*	824.0	5407.99	5413.82	5411.99	5414.12	0.001539	4.39	187.65	53.43	0.41			4.39	5.83
67	824.0	5407.77	5413.55	5412.36	5414.06	0.002966	5.74	143.64	44.32	0.56			5.74	5.78
66.75*	824.0	5407.70	5413.45	5412.30	5413.99	0.003079	5.86	140.69	43.50	0.57			5.86	5.75
66.5	824.0	5407.63	5413.33	5412.26	5413.90	0.003421	6.08	135.42	42.81	0.60			6.08	5.70
66.255*	824.0	5407.58	5413.07	5412.25	5413.79	0.004383	6.81	121.04	38.53	0.68			6.81	5.49
66.01	824.0	5407.52	5412.67	5412.20	5413.64	0.006448	7.88	104.51	33.98	0.79			7.88	5.15
65.84*	824.0	5407.39	5412.21	5412.10	5413.48	0.009263	9.03	91.23	32.86	0.96			9.03	4.82
65.67*	824.0	5407.25	5411.94	5411.94	5413.30	0.010117	9.35	88.10	32.50	1.00			9.35	4.69
65.5	824.0	5407.12	5411.36	5411.65	5413.06	0.013980	10.47	78.70	31.35	1.16			10.47	4.24
65.25*	824.0	5406.85	5411.71	5411.38	5412.69	0.006980	7.95	103.64	37.10	0.84			7.95	4.86
65	824.0	5406.58	5411.55	5411.32	5412.50	0.007832	7.81	105.52	42.29	0.87			7.81	4.97
64.8*	824.0	5406.58	5411.44	5411.14	5412.33	0.007041	7.58	108.66	42.54	0.84			7.58	4.85
64.6*	824.0	5406.58	5411.30	5410.95	5412.19	0.006882	7.57	108.86	42.18	0.83			7.57	4.72
64.4	824.0	5406.58	5411.06	5410.79	5412.04	0.007596	7.93	103.94	40.31	0.87			7.93	4.48
64.175*	824.0	5406.38	5411.27	5410.40	5411.76	0.003717	5.62	146.60	56.27	0.61			5.62	4.89
63.95	824.0	5406.17	5411.37	5410.07	5411.63	0.001851	4.11	202.85	118.53	0.44		0.24	4.06	5.20
63.7633*	824.0	5405.99	5411.29	5410.06	5411.59	0.002207	4.39	187.78	70.87	0.48			4.39	5.30
63.5766*	824.0	5405.81	5411.20	5410.08	5411.54	0.002575	4.70	175.44	67.47	0.51			4.70	5.39
63.39	824.0	5405.63	5411.10	5410.04	5411.49	0.002850	5.00	164.81	62.29	0.54			5.00	5.47
63.2066*	824.0	5405.46	5411.09	5409.81	5411.43	0.002323	4.67	176.30	63.21	0.49			4.67	5.63
63.0233*	824.0	5405.30	5411.08	5409.48	5411.37	0.001767	4.36	189.16	61.11	0.44			4.36	5.78
62.84	824.0	5405.13	5411.08	5409.13	5411.33	0.001353	4.09	201.67	58.16	0.39			4.09	5.95
62.6	824.0	5405.13	5411.09	5408.81	5411.29	0.001001	3.62	230.83	81.16	0.34		0.37	3.57	5.96
62.475*	824.0	5405.13	5410.95	5409.25	5411.26	0.001649	4.53	185.92	67.10	0.43		0.61	4.43	5.81
62.35	824.0	5405.13	5410.58	5409.62	5411.20	0.003698	6.37	134.29	60.75	0.62		0.84	6.14	5.44
62.175*	824.0	5405.10	5410.53	5409.65	5411.13	0.003725	6.22	135.50	58.80	0.63		0.73	6.08	5.43
62	824.0	5405.08	5410.47	5409.66	5411.05	0.003867	6.14	136.84	55.63	0.63		0.95	6.02	5.39
61.75*	824.0	5405.03	5410.14	5409.60	5410.92	0.005536	7.08	117.12	47.12	0.75		0.78	7.04	5.11
61.5	824.0	5404.98	5409.85	5409.46	5410.75	0.006513	7.63	108.02	40.79	0.81		0.42	7.63	4.87
61.25*	824.0	5404.82	5409.86	5409.20	5410.54	0.004876	6.66	123.81	46.89	0.71		0.40	6.66	5.04
61	824.0	5404.66	5409.94	5408.79	5410.37	0.002619	5.30	162.86	69.18	0.53	1.15	0.41	5.06	5.28
60.75*	824.0	5404.53	5409.90	5408.54	5410.30	0.002127	5.11	171.00	71.13	0.49	0.92	0.94	4.82	5.37
60.5	824.0	5404.39	5409.86	5408.37	5410.25	0.001947	5.07	175.31	66.81	0.47	0.76	1.46	4.70	5.47
60.25*	824.0	5404.26	5409.63	5408.49	5410.17	0.003118	5.93	140.35	50.74	0.58	0.68	0.35	5.87	5.37
60	824.0	5404.13	5409.20	5408.63	5410.04	0.005738	7.39	111.55	39.08	0.77	0.10		7.39	5.07
59.75*	824.0	5404.00	5409.15	5408.43	5409.87	0.005033	6.83	120.59	42.96	0.72			6.83	5.15
59.5	824.0	5403.88	5409.00	5408.39	5409.74	0.005495	6.92	119.59	46.56	0.74		0.94	6.89	5.12
59.25*	824.0	5403.84	5408.84	5408.29	5409.61	0.005481	7.03	118.13	46.75	0.75		0.99	6.98	5.00
59	824.0	5403.80	5408.74	5408.16	5409.46	0.005043	6.86	122.21	49.79	0.72		1.16	6.74	4.94
58.82*	824.0	5403.67	5408.67	5407.99	5409.37	0.004723	6.74	123.85	59.66	0.70		1.04	6.65	5.00
58.64*	824.0	5403.54	5408.58	5407.80	5409.28	0.004674	6.70	124.00	96.01	0.70		0.93	6.65	5.04
58.46	824.0	5403.41	5408.47	5407.78	5409.19	0.004969	6.79	122.00	117.01	0.71		0.82	6.75	5.06
58.23*	824.0	5403.30	5408.58	5407.71	5409.01	0.002918	5.57	210.07	178.28	0.56	1.26	0.79	3.92	5.28
58	824.0	5403.19	5408.59	5407.66	5408.92	0.002225	5.06	248.23	182.53	0.49	1.37	0.74	3.32	5.40
57.8825*	824.0	5403.17	5408.64	5407.56	5408.87	0.001599	4.45	293.62	183.14	0.42	1.42	0.64	2.81	5.47
57.765*	824.0	5403.16	5408.66	5407.47	5408.83	0.001206	3.97	335.60	183.30	0.37	1.42	0.59	2.46	5.50
57.6475*	824.0	5403.14	5408.68	5407.42	5408.81	0.000937	3.57	376.05	183.51	0.32	1.41	0.55	2.19	5.54
57.53	824.0	5403.12	5408.69	5407.37	5408.79	0.000749	3.24	414.97	183.92	0.29	1.38	0.50	1.99	5.57

Profile Output Table - No Name Arroyo Reconstructed Channel 100yr-6hr
 HEC-RAS Plan: Postmine River: No Name Reach: Reach 1 Profile: PF 4

River Sta.	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl	Vel Lt (ft/s)	Vel Rt (ft/s)	Vel Total (ft/s)	Max Chnl Depth (ft)
57.38	824.0	5403.07	5408.59	5406.82	5408.77	0.001036	4.32	358.19	181.53	0.36	1.39	1.77	2.30	5.52
57.23	824.0	5403.06	5408.47	5406.83	5408.74	0.001277	4.47	270.27	170.97	0.39	1.00	1.59	3.05	5.41
57	824.0	5403.03	5408.44	5407.29	5408.70	0.001689	4.61	274.61	171.42	0.43	1.44	0.77	3.00	5.41
56.75*	824.0	5402.90	5408.43	5407.25	5408.66	0.001418	4.46	306.41	192.26	0.40	1.37	0.84	2.69	5.53
56.5	824.0	5402.77	5407.23	5407.23	5408.49	0.008226	9.06	95.73	139.74	0.93	1.31	1.36	8.61	4.46
56.375*	824.0	5402.67	5407.36	5407.36	5408.04	0.004698	7.24	177.31	156.54	0.71	1.72	1.31	4.65	4.69
56.25*	824.0	5402.58	5407.07	5407.30	5407.95	0.006320	8.12	156.74	154.10	0.82	1.80	1.59	5.26	4.49
56.125*	824.0	5402.48	5406.90	5407.15	5407.85	0.007119	8.52	154.10	163.18	0.87	1.84	1.82	5.35	4.42
56	824.0	5402.38	5406.71	5407.00	5407.75	0.008082	8.94	150.96	168.24	0.92	1.92	2.11	5.46	4.33
55.875*	824.0	5402.38	5406.59	5406.89	5407.65	0.008624	9.12	149.57	164.79	0.95	2.05	2.10	5.51	4.21
55.75*	824.0	5402.38	5406.47	5406.82	5407.54	0.009089	9.26	149.27	162.06	0.97	2.18	2.08	5.52	4.08
55.625*	824.0	5402.38	5406.37	5406.70	5407.40	0.009156	9.22	153.24	163.16	0.96	2.28	2.04	5.38	3.99
55.5	824.0	5402.38	5406.56	5406.56	5407.14	0.005242	7.36	207.12	183.52	0.74	2.15	1.69	3.98	4.18
55.375*	824.0	5402.38	5406.45	5406.45	5406.99	0.005004	7.04	210.68	189.22	0.72	2.05	1.60	3.91	4.07
55.25*	824.0	5402.38	5406.34	5406.34	5406.85	0.004863	6.77	213.62	193.57	0.71	1.98	1.62	3.86	3.96
55.125*	824.0	5402.38	5406.22	5406.22	5406.71	0.004875	6.57	214.96	198.16	0.71	1.95	1.52	3.83	3.84
55	824.0	5402.38	5406.18	5406.18	5406.58	0.004222	6.04	231.23	204.68	0.66	1.88	1.39	3.56	3.80
54.875*	824.0	5402.38	5405.93	5406.02	5406.50	0.006512	7.02	195.58	198.99	0.80	2.08	1.19	4.21	3.55
54.75*	824.0	5402.38	5405.95	5405.93	5406.41	0.005459	6.48	215.07	201.76	0.74	2.10	0.94	3.83	3.57
54.625*	824.0	5402.37	5405.89	5405.85	5406.33	0.005557	6.43	217.48	202.82	0.74	2.16	0.63	3.79	3.52
54.5	824.0	5402.37	5405.83	5405.77	5406.25	0.005721	6.41	219.28	203.79	0.75	2.22	0.17	3.76	3.46
54.25*	824.0	5402.29	5405.60	5405.60	5406.09	0.006515	6.93	207.83	199.87	0.80	2.36	0.95	3.96	3.31
54	824.0	5402.20	5405.34	5405.40	5405.91	0.008036	7.59	194.61	191.95	0.88	2.63	1.53	4.23	3.13
53.8233*	824.0	5402.10	5404.96	5405.17	5405.71	0.012535	8.53	167.69	187.80	1.08	2.95	1.73	4.91	2.86
53.6466*	824.0	5402.01	5405.05	5404.93	5405.40	0.006266	6.25	232.84	221.36	0.77	2.43	1.79	3.54	3.04
53.47	824.0	5401.91	5405.06	5404.73	5405.27	0.003902	4.97	290.65	249.39	0.61	2.11	1.72	2.84	3.15
Max							10.45	Avg						
Min							2.90							
Avg							6.39							

Only the reconstructed channel reaches were included in determining the maximum, minimum, and average velocities. The reconstructed reaches are from Station 81.50 to 72.23 and from Station 71.00 to 67.00.