

Appendix E

Risk Based Design Guideline Risk Matrices

Project: Upper Wenatchee RM 36

Phase: Preliminary (15%) Design

Structure Type: N/A - Reach characterization

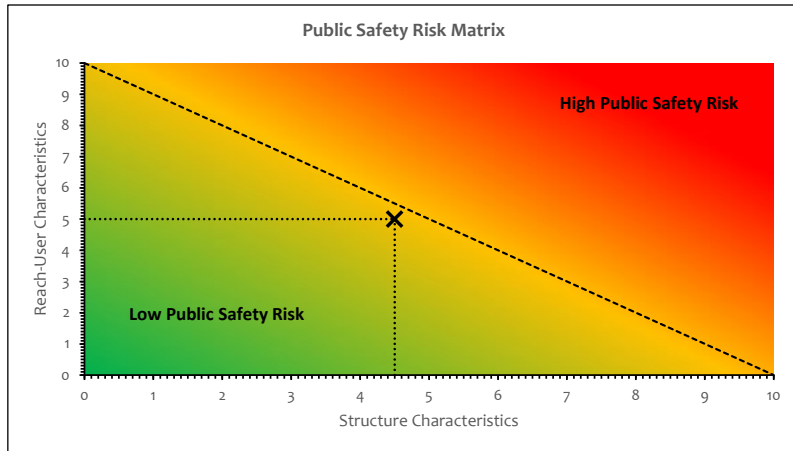
Structure Location: N/A - Reach characterization

Analyzed by: N. Truscott

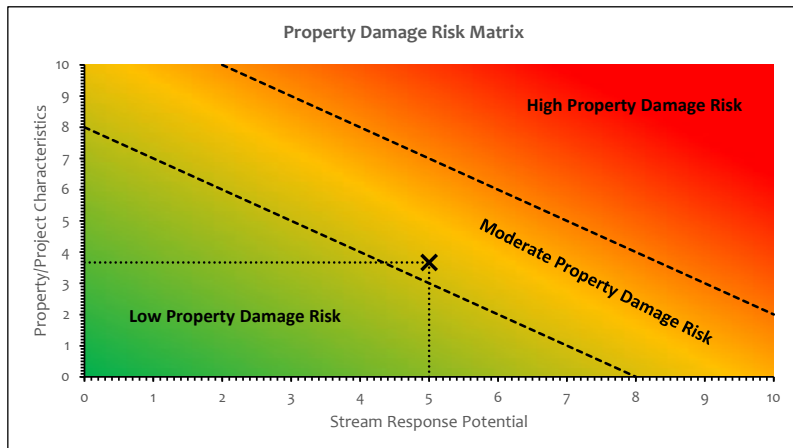
Checked by: J. Soden

Approved by: L. Embertson

Date: Oct. 16, 2020



| Public Safety Risk | Score | Descr. |
|---------------------|------------|---|
| Y-Axis | | |
| Frequency of use | 6 | Some local recreation use |
| Skill Level | 5 | Low skill level, mostly tubers |
| Access | 5 | Limited to local access for the most part |
| Child Presence | 4 | Potentially some children users |
| | 5.0 | |
| X-Axis | | |
| Active Channel? | 3 | Planform is relatively stable |
| Outside of bend? | 4 | Most structures on inside of bend, side chnl, or island |
| Strainer potential? | 5 | Most structures have dense racking material face |
| Egress potential? | 4 | Right bank relatively easily accessible |
| Sight Distance? | 3 | Wide channel and straight reach |
| Depth x Velocity? | 8 | High depth and velocity during high flows |
| | 4.5 | |



| Property Damage | Score | Descr. |
|-----------------------|------------|---|
| Y-Axis | | |
| In-channel structures | 6 | Downstream bridge, but high freeboard |
| Floodplain structures | 2 | No structures, only FS road |
| Land Use | 3 | National Forest land |
| | 3.7 | |
| X-Axis | | |
| Stream type | 6 | Transport in upper, potentially response in lower |
| Riparian Corridor | 3 | Pretty continuous, extensive on left bank |
| Bed scour | 5 | Mostly gravel and cobble, some exposed bedrock |
| Hydrologic Regime | 5 | Snow-melt dominated |
| Bank erosion | 6 | Shallow alluvium overlaid on shallow bedrock |
| | 5.0 | |