

# **Appendix B**

## **Water-source Suitability Form**



### Water-source Suitability Form

Circle the correct answer for each indicator below

Indicator	NA	High	Moderate	Low
Location of facility		Minimal intrusion to riparian area	Part of facility in riparian area	Facility located in riparian area (100%)
Landscape position		Uplands-Forested areas	Floodplain	Vulnerable or unstable location - Located on outside bend of stream
Stream channel type		Well-Armored Step pool type A1, A2 (transport reach) low sediment yield	Stream types C or E stable but can adjust laterally over time	Fine-textured soils, unstable reach types D-F or G; poorly vegetated; evidence of streambank erosion
Streambank condition (includes trampling, road cuts, or other mechanical impacts to the streambank) and floodplain intrusion		Minimal impacts to streambank – does not impact floodplain processes	Some streambank impacts with limited excavation	Thru cut access road to stream edge, stream bed altered to create pond – May impact floodplain process, restrict access
Delivery potential to stream (erosion potential and connectivity to stream)		No potential for sediment or spill movement into stream	Potential for sediment to mobilize but effective filter strip	Potential for sediment to mobilize and enter stream channel.
Position of drafting site (within the streambed, floodplain)		Minimal intrusion to streambed or floodplain (hydrant)	Margin of floodplain	Constructed in streambed or other sensitive location (in-channel pond)
Streambed Alteration (includes modification of the channel bottom to create a pool for drafting or recreational use)		No identifiable modification to streambed	Some streambed modification	Streambed altered to create pool, may include creating a dam structure or mechanical modification of channel bottom
Water flow capacity		Adequate flows to maintain stream health, aquatic, and habitat needs throughout drafting season	Partially limiting flows for aquatic or habitat needs	Limited stream flows to meet Forest LRMP goals and objectives.
Height of vertical lift from water surface to vehicle loading area Height _____ft		Less than 10 foot vertical lift	10-17 foot vertical lift	Greater than 17 feet vertical lift
Water-source longevity and maintenance needs		Requires minimal maintenance between use and poses no resource risks	Requires some maintenance for operations.	Requires routine maintenance prior to use and may require maintenance/repair after high flows or floods.
Summary Suitability Rating		_____	_____	_____

Add up the circled indicators in each column (High, Moderate and Low) to rate each site.

NA = Not applicable at site

High = Site is HIGHLY suitable for a water source.

Moderate= Site has some constraints, which requires mitigation and project design modification.

Low = Site has severe constraints, which may dictate an alternate location or drafting method.

Prefield Office Review of Existing Data

Indicator	N/A	High	Moderate	Low
Watershed and stream reach condition		Watershed Condition Class I. The drainage network is generally stable.	Watershed Condition Class II. Portions of the watershed may exhibit an unstable drainage network	Watershed Condition Class III. A majority of the drainage network may be unstable.
Presence of TES species		TES Species absent; outside range of TES species distribution	Potential for TES species presence; presence not confirmed	Presence of TES aquatic or riparian species, and unique or endemic (non-TES) species and/or habitat
Aquatic Nuisance Species		No nuisance species on or near forest	Nuisance species present on forest, but not within 5 <sup>th</sup> field watershed	Nuisance species present at site or within 5 <sup>th</sup> field watershed
Proximity to other water sources		> 10 miles	5 -10 miles	< 5 miles
Summary/Comments				

Atmospheric pressure= 14.7 psi. A pressure of 14.7 psi is capable of lifting water 2.3 ft for every lb of pressure 2.3 ft/1 lb psi up to 33.9 feet (2.3 ft X 14.7 = 33.9)

Diagram stream, pond, access road, and other uses including recreational activities below:

Appendix C further defines the 14 indicators used to complete the Water-source Suitability Form in appendix B.