



Timber Harvest Task Force:
Forest Harvesting BMP Recommendations

Forest Harvest BMPs

Forest Harvests use a wide variety of practices to minimize water quality impacts including:

- Water bars
- Culverts
- Maintaining forest buffers (also highly effective for N removal)
- Stream crossings where necessary (many harvests aim to avoid crossings)
- Avoiding depositing organic material from harvest in streams



Current Forest Harvest BMP in CAST:

Forest Harvest BMPs decrease total loads by:

- Total Suspended Solids (TSS) – **60%**
- Total Nitrogen (TN) – **50%**
- Total Phosphorus (TP) – **60%**

- Determined via 2009 report by Pamela Edwards & Karl Williard
- 1-year credit duration
- [More information in the BMP Guide, Page 162](#)

	Original recommended loading rate ratio	Current forest harvesting BMP efficiency	Loading rate ratio after BMP application	% of additional loads over True Forest removed by BMPs
TN	7.03	50%	3.52	58%
TP	3.12	60%	1.25	88%
TSS	3.05	60%	1.22	89%

BMP efficiency re-evaluation

- Evaluated studies published 2009 – present and conducted interview with experts
- Initial review looked at TN, TP and TSS. Re-focused on TN given already high efficiencies for TP and TSS
- Focused on research evaluating impacts on TN loads (not concentrations)
 - Loads measure the total amount of a pollutant entering a waterway over a period of time (accounting for changes in streamflow)
- Identified one additional study evaluating effects of harvest on TN loads. Calculated a 58% efficiency from BMPs to achieve loading rate ratios (Boggs et al. 2015)
- Literature reviewed by Edwards and Williard found a 60-80% efficiency for TN loads (Wynn et al. 2000)

Forest Harvesting BMP Recommendations

Decision Requested *(previously approved by WTWG and FWG)*

1. Recommend changing the efficiency rates of forest harvest BMPs to:
 - **TN from 50% to 60%**
 - **Maintain efficiencies for TP and TSS**
2. Recommend changing the **credit duration for forest harvest BMPs to three years.**