

**WA DNR Monitoring Projects to fund in 2019-2021: DRAFT: September 4, 2019**

<b>Project</b>	<b>Lead</b>	<b>Completion Date</b>
<b>1. Treatment unit monitoring protocol</b> <ul style="list-style-type: none"> <li>• Develop template protocol for landowners to use for treatment monitoring</li> <li>• Set up tablet data collection system and centralized storage for data</li> </ul>	Sharon Frazey: MARS	Jan 2020
<b>1. Current Conditions Dataset: Use 2017 DAP (Phodar)</b> <ul style="list-style-type: none"> <li>• Generate metrics with existing LIDAR plots with 2017 DAP: structure classes, inventory metrics, + accuracy assessment</li> <li>• Mosaic DAP canopy surface models &amp; make available to managers</li> </ul>	UW-Luke Rogers	June 2020
<b>2. Restoration Needs Assessment: 2017 Data</b> <ul style="list-style-type: none"> <li>• Replicate Haugo-Demao methods with 2017 current conditions &amp; HRV ranges</li> <li>• Include treatment type and estimates of costs &amp; revenues.</li> <li>• Include fire severity departure</li> </ul>	UW- Brian Harvey	Sept 2020
<b>3. Effects of treatments on Snow Pack</b> <ul style="list-style-type: none"> <li>• Field study to generate data to validate and improve landscape scale water yield models (DHSVM).</li> </ul>	UW- Jessica Lundquist & Susan Dickerson-Lange	June 2021
<b>4. Treatment effectiveness &amp; longevity:</b> <ul style="list-style-type: none"> <li>• Combine all existing plot data on treatment effectiveness &amp; longevity.</li> <li>• Re-measure plots in 2020 field season</li> <li>• Results will inform long term treatment needs for Eastern WA.</li> </ul>	UW- Brian Harvey	June 2021
<b>5. Investigate improvements in species composition mapping.</b> <ul style="list-style-type: none"> <li>• Produce best possible species composition layer for EWA using a variety of new remotely sensed data sources.</li> </ul>	OSU	Sept 2020
<b>6. Continue change detection research with DAP &amp; other data</b> <ul style="list-style-type: none"> <li>• Methods to improve DAP and correct issues with open canopy stands</li> <li>• Stand level monitoring with DAP</li> <li>• Expand NSO study to all lands in East Cascades</li> <li>• Train DNR staff in LiDAR processing and analysis</li> </ul>	UW-Van K	June 2021
<b>7. Current Conditions Dataset: 2019 DAP</b> <ul style="list-style-type: none"> <li>• Investigate plot networks &amp; need for additional sampling in 2020</li> <li>• Install additional plots in 2020 field season</li> <li>• Produce new version of current conditions dataset with 2019 DAP</li> </ul>	DNR – UW for new plot install	June 2021
<b>8. Monitor change in conditions from: 2015 to 2019</b> <ul style="list-style-type: none"> <li>• Use DAP, Landsat &amp; other data sources</li> </ul>	DNR FH Staff	Dec 2020 if data available

