






Department of Ecology Unmanned Aerial Systems (UAS)  
Project Description and Checklist

<b>Ecology Program</b>	ITSO GIS	
<b>Project Title</b>	Stillaguamish Hydrography Verification	
<b>Ecology Project Manager</b>	Joshua Greenberg	Phone: 360-742-6992
<b>Ecology Unit Supervisor</b>	Christina Kellum	Phone: 360-489-4118
<b>Ecology Section Manager</b>	Mark Solie	Phone: 360-742-2953
<b>Ecology Program Manager</b>	Scott West	Phone: 360-515-8593
<b>Type of UAS operation (select one)</b>	<input checked="" type="checkbox"/> Ecology owned and operated <input type="checkbox"/> Contracted <input type="checkbox"/> Volunteer (not an Ecology employee)	
<b>UAS Pilot(s) in Command (if known)</b>	Bradley McMillan	Phone: 564-200-2415
	FAA Remote Pilot Certified: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* Ecology Certified: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*  <i>*if No, certification by both FAA and Ecology is <b>required</b> prior to approval of project</i>	
<b>Reason for using UAS</b>	To collect photographs of locations requiring verification of updated stream locations, culverts, fish passage, etc. The aerial perspective from drone imagery gives a better understanding of topography and how different stream systems interact with one another.	
<b>Project Location</b>	Stillaguamish Watershed: several locations requiring verification of updated stream locations  Area between Verlot and Silverton 48.070556 -121.687222 Downstream of Robe Canyon 48.103056 -121.953889 Jordan 48.147778 -122.035278 Nicks Rd above River Meadows Park 48.175278 -122.051389	
<b>Project Description/Purpose</b>	Ecology has been working with several contractors and local agencies to improve mapping of hydrography in the Stillaguamish watershed. These models are based primarily of Lidar derived surface data. While much of the verification of the data can be made from the desktop using aerial imagery and reviewing the lidar surface, there are some areas that could benefit from field research locally. The UAS imagery will allow us to quickly view some of the more challenging hydrography mapping regions, to determine the accuracy of the models.	
<b>Scheduled Dates of Project</b>	Start Date: 3/28/2023 End Date: 3/28/2023	
<b>Does airspace require additional authorization by FAA or Air Traffic Control (ATC)?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>Will UAS be used regularly during project?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

<b>Type of data to be collected</b>		<input type="checkbox"/> Environmental monitoring <input checked="" type="checkbox"/> Mapping/Orthomosaic <input checked="" type="checkbox"/> Site Photos <input type="checkbox"/> Temperature/Thermal imaging	<input type="checkbox"/> Structure-from-motion (SfM) <input checked="" type="checkbox"/> Photography/Videography <input type="checkbox"/> Lidar Other <i>Enter here</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	If applicable, Ecology has approved a Quality Assurance Project Plan (QAPP) for monitoring projects that include data collection with a UAS		
<b>Project Checklist</b>			
<input checked="" type="checkbox"/>	Pilot in command (PIC) has FAA Part 107 certification, and the training necessary to operate the UAS used in this project		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	Proper notification and permissions from air traffic control (ATC) were received if UAS flight will occur in airspace class B, C, D, or E airspace.		
<input checked="" type="checkbox"/>	PIC has reviewed and understands the Department of Ecology UAS Policy 22-06 (applies to Ecology employees only).		
<input checked="" type="checkbox"/>	PIC has provided the Project Manager with a copy of the UAS Standard Operating Procedure (SOP).		
<input checked="" type="checkbox"/>	PIC has read The National Telecommunications and Information Administration's (NTIA) document "Voluntary Best Practices for UAS Privacy, Transparency, and Accountability"		
<b>Signatures</b>			
<b>Ecology UAS Coordinator:</b>		Date 2/27/23	
<b>Ecology Project Manager:</b>		Date 2/27/2023	
<b>Ecology Supervisor or Manager:</b>		Date 2/27/2023	
<b>Ecology Program Manager:</b>	Scott West (approved via email)	Date 3/2/2023	
<b>Ecology Deputy Directory:</b>		Date 3/2/2023	

NOTE: Proper documentation of project and UAS use must be included on Ecology's [Drones - Washington State Department of Ecology](#) website after approval of this checklist and project according to Ecology's UAS Policy 22-06

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To request an ADA accommodation, contact Ecology by phone at 564-200-2415 or email at [brad.mcmillan@ecy.wa.gov](mailto:brad.mcmillan@ecy.wa.gov). For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.