

Washington Seaplane Pilots Association
North Cascades National Park – Ross Lake National Recreational Area
Pilot Information Brief and Noise Abatement Procedure for Ross and Diablo Lakes

This Pilot Information Brief/Noise Abatement Procedure is intended to provide guidelines for pilots flying to Ross or Diablo Lakes for day trips, overnight camping or while transiting on interstate travel.

The North Cascades National Park Service is working in partnership with the Washington Seaplane Pilots' Association (WSPA) to foster a cooperative relationship whereby seaplane pilots contribute to the Ross Lake NRA in a positive way, while working to minimize potential noise impact from their aircraft. Furthermore, WSPA provides training for its pilots related to this Noise Abatement Procedure.

The fundamental objective of these procedures is to encourage pilots to proactively work with the National Parks Service to contribute to the quality of the park. This will be accomplished by taking steps to help maintain the quality of campsites, "leaving no trace", and minimizing their impact on the park and its visitors, particularly with respect to noise.

This document is primarily focused on Ross Lake as Diablo Lake is comparatively small with mountains on three sides and there are limited campsites with no available docks.

Noise abatement procedures at Ross (and Diablo) Lakes are voluntary measures by pilots to "fly friendly" and be good neighbors to the other visitors. Pilots should only deviate from these procedures when necessary to comply with FAA regulations or in the interest of safety. These guidelines do not apply where it would conflict with Federal Aviation Regulations or where other procedures are considered necessary by a pilot to operate safely.

➤ **General Guidelines**

- It is required that seaplane pilots "fly friendly" and work to limit their noise signature. This is covered specifically in the Noise Abatement Procedures below.
- Seaplanes while on the water must remain at least 1,000 feet from the Ross Lake and Diablo Lake dams. Furthermore power lines exist in the general locations of the dams.
- Report any problems or violations to the North Cascades Ranger Station in Marblemount (360)854-7300 upon return (there is no cell phone service in the Ross Lake area).
- Ross Lake contains numerous unmarked obstructions (stumps and sharp dark rocks) near the shoreline, even at full pool. Extreme caution should be exercised when operating on the lake below full pool as there are numerous unmarked stumps, logs, gravel bars and large boulders throughout the lake and in particular, on the north end of the lake. It is strongly recommended that pilots avoid take-off or landing north of Silver Creek Campground. These conditions are generally found in the spring and

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early summer. By law, the reservoir is required to be at full pool by July 1. The level may be checked at:

http://waterdata.usgs.gov/wa/nwis/dv?referred_module=sw&site_no=12175000

- Ross Lake Resort is accessible via seaplane and overnight tie-up is available. Generally cabins are reserved well in advance, although cancellations may be available. The resort phone number is (206) 386-4437 and is operated by Tom and Carol Barnett. Except in calm wind conditions, pilots should land well north of the log boom to avoid downdrafts and turbulent conditions (pilots should touch down well north of Green Point). In a moderate southerly, turbulence can extend 1,000 to 1,500 feet AGL. Upon landing, pilots can taxi through an opening in the log boom, which is identified on either side by two lights which may or may not be operating. In strong southerlies, pilots should taxi nearly to Roland Point before departing south.
 - Do more than “leave no trace” by removing any trash found on shore or around campsites. Please document the removal of trash by email note to WSPA (stephen@ratzlaff.co) and the North Cascades Ranger Station.
 - Recognize that cell phone access is unavailable anywhere in the environs of Ross Lake. A SPOT or other GPS reporting device is suggested.
 - Strong southerlies (20+ knots) may be encountered with little advance warning. For this reason, seaplane pilots planning an overnight stay will want to reserve a campsite with good protection from a southern swell. Those campsites with good protection and a dock are noted below. Use of a campsite must be reserved in advance (24 hours typically) via telephone from the North Cascades Ranger Station at (360)854-7300. A good map for planning campsites may be obtained from the NPS at: http://www.nps.gov/noca/planyourvisit/upload/rosslake_6-08.pdf
 - Self-announce on 122.9, which is the same frequency as the two nearest airports, Mears (3W5) in Concrete and Darrington (1S2).
- General Noise Abatement Procedures
- It is important to be diligent regarding noise abatement and limit aircraft noise as much as possible, recognizing that safety is the first priority.
 - Noise reduction is primarily accomplished by reducing propeller speed as much as possible for take-off, reducing it further once off the water, and maintaining distance from campsites and vessels on the lake. Maximum noise from the propeller is broadcast off the tips, perpendicular to the aircraft. Thus, less noise occurs to the area directly ahead or behind the aircraft.

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- All pilots must comply with all current FAA regulations regarding National Parks and noise sensitive areas. Specifically, if not landing or departing, pilots should make every effort to fly no less than 2,000 feet above ground level (AGL), weather permitting.
 - Departure, arrival, climb after take-off, and descent for landing should be planned so as to avoid prolonged flight at low altitudes.
 - As stated in FAR (Federal Aviation Regulations) 91.115: “Each person operating an aircraft on the water shall, insofar as possible, keep clear of all vessels and avoid impeding their navigation, and shall give way to any vessel or other aircraft that is given the right-of-way by any rule of this section.”
 - As stated in FAR 91.119: “Except when necessary for take-off or landing, no person may operate an aircraft below 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.”
 - As a courtesy to other visitors, plan to operate only between the period beginning one hour after sunrise and ending one hour before sunset.
 - Pilots are strongly requested to avoid step taxiing. Allow time to do an idle power taxi to your take-off position as that has minimal noise impact.
 - Pilot training activities are strongly discouraged.
- Noise Abatement During Arrival
- In order to minimize overflight, pilots should pre-program coordinates for their planned campsite into their GPS and land adjacent to the planned campsite. Following are GPS coordinates for campsites with docks which provide reasonable protection from the typical southern swell. NOTE: These coordinates are unverified and should not be relied upon for precise navigation.
 - Cougar Island (48° 45.187'N, 121° 1.698'W)
 - McMillan (48° 46.384'N, 121° 2.078'W)
 - Spencer's (48° 46.623'N, 121° 1.901'W)
 - May Creek (Possible Exposure, log boom may not be sufficient) (48° 47.108'N, 121° 1.909'W)
 - Devil's Junction (48° 50.124'N, 121° 1.417'W)

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- Cat Island (48° 53.043'N, 121° 2.273'W)
- Little Beaver (48° 54.900'N, 121° 4.512'W)
- Silver Creek (Likely dry in early spring and summer, stumps may be exposed in area prior to July 1) (48° 58.239'N, 121° 6.257'W)
- Note: Dead wood which may be chopped for firewood is generally available at most campsites except island locations where firewood gathering is not permitted.
- On approach for landing, aircraft with constant speed propellers should not increase the propeller to full RPM until the power has been reduced to final approach power.
- Noise Abatement during Departure
 - Taxi at least 1,000 feet from shoreline before run-up and departure.
 - Use reduced RPM for take-off whenever possible. After take-off, pilots should reduce propeller RPM once off the water. The propeller RPM may be increased, if needed, when above 2,000 feet AGL. Pilots should climb at the Best Angle of Climb (V_x) until reaching 2,000 feet AGL. (The purpose of this is to limit time and distance in climb.)
 - Note: A reduction in manifold pressure only minimally reduces noise. Reducing RPM's (propeller tip speed) produces the greatest reduction in noise with the least impact to aircraft performance.
 - Noise is most pronounced ninety degrees to either side of the airplane. For this reason it is best to fly away from noise sensitive areas or boaters.
 - Fly just right of mid-channel to avoid noise sensitive shoreline while also maximizing distance from other vessels on the water whenever possible, and avoiding aircraft flying in the opposite direction.
- Contact Information
 - For aviation guidance, please contact the Stephen Ratzlaff, President, Washington Seaplane Pilots Association stephen@ratzlaff.co or (206)324-2331.
 - For camping or general information, contact the National Park Service-North Cascades Ranger Station in Marblemount at (360) 854-7300.