

10(a)(1)(A) Recovery Permit Minimum Qualifications Sierra Nevada Yellow-Legged Frog (*Rana sierrae*)

A. Introduction

This document identifies the U.S. Fish and Wildlife Service's (Service) recommended minimum qualifications for conducting protocol surveys for the federally listed Sierra Nevada yellow-legged frog. They are intended to ensure the permittee has a broad range of experience that includes: 1) conducting focused surveys for Sierra Nevada yellow-legged frogs in accordance with the current survey protocol, "Knapp, R. A., and K. R. Matthews. 2000. Non-native fish introductions and the decline of the mountain yellow-legged frog from within protected areas. *Conservation Biology* 14(2):428–438."; 2) knowledge of Sierra Nevada yellow-legged frog biology and habitat; 3) field identification of each life stage of Sierra Nevada yellow-legged frogs and co-occurring species; and 4) safe capture and handling of frogs.

Non-protocol surveys and other specialized permit activities (e.g., handling eggs, collecting biological samples, conducting radio telemetry, and instructing workshops) require a proposal and demonstrated proficiency in conducting the requested activities under supervision of a permitted biologist. Contact the applicable [Fish and Wildlife Office](#) for more information on how to qualify for non-protocol surveys and specialized activities.

B. Minimum Qualifications

Experience must be acquired under direct supervision of a permitted biologist. Prospective applicants must have, at minimum:

1. Training in disinfecting equipment and clothing before and after entering aquatic habitat;
2. Familiarity with suitable habitats for and co-occurring species with the Sierra Nevada yellow-legged frog;
3. 40 hours of experience conducting five protocol surveys for Sierra Nevada yellow-legged frogs and other federally listed frogs. At least one frog of the target species must be detected for a survey to contribute positive hours.
 - a. At least 24 of these hours must be gained through at least three protocol surveys for the Sierra Nevada yellow-legged frog. The remaining experience may be with other federally listed frogs, such as the mountain yellow-legged frog (*Rana muscosa*), the foothill yellow-legged frog (*Rana boylei*), or the California red-legged frog (*Rana draytonii*).
 - b. Survey experience must be acquired in at least two different aquatic features.
 - c. A Service-approved Sierra Nevada yellow-legged frog workshop may count towards the 40-hour requirement.
 1. Classroom component allows the applicant to replace up to six hours of required Sierra Nevada yellow-legged frog survey experience with other listed frog experience. See **Scenario D.1** below for an example.
 2. Field component may count as up to eight hours of Sierra Nevada yellow-legged frog survey experience.
 - d. Up to four hours of negative protocol surveys for the Sierra Nevada yellow-legged frog may count towards the 40-hour requirement; and,

4. Captured, handled, and positively identified at least ten adult and ten larval Sierra Nevada yellow-legged frogs or other federally listed frogs. Have observed at least one Sierra Nevada yellow-legged frog egg mass.
 - a. At least two adults and two larvae must be Sierra Nevada yellow-legged frogs.
 - b. At least two adults and two larvae must be foothill yellow-legged frogs.
 - c. The remaining adult and larval handling experience may be with other federally listed frogs.

Please note: while other experience such as incidental observations, construction monitoring, and other types of surveys may be good experience and worthwhile to document for our review, it is considered additional experience and does not count towards the number of hours required for a recovery permit.

C. Verifiable Documentation

The applicant must document their field experience acquired under supervision and submit the following information with their recovery permit application:

1. Species experience addressing **B.3-4** above, which we recommend be submitted in the template format at this [link](#) and include:
 - a. The name(s) of the supervising permitted individual(s) and their associated permit number(s);
 - b. Dates and hours of field experience and the type of activity conducted (e.g., protocol surveys via hand capture, dip net, or seine; insertion of passive integrated transponder [PIT] tags; etc.);
 - c. The number and age class of all captured and/or handled Sierra Nevada yellow-legged frog and other listed frog species; and,
 - d. The specific location and county where the activity was conducted.
2. If using hours acquired during a Service-approved training workshop to fulfill the minimum qualifications, a signed certificate or letter of recommendation from an instructor must be included in the application.
3. A letter of recommendation from at least one supervising and permitted individual describing the applicant's ability to independently conduct protocol surveys for the Sierra Nevada yellow-legged frog. The letter(s) of recommendation must also specifically address the applicant's ability to independently conduct non-protocol surveys and other specialized permit activities, if requested.

D. Scenarios

All the below applicants have 40 qualifiable hours:

1. **Classroom workshop and surrogate species.** Applicant A successfully completed a Service-approved Sierra Nevada yellow-legged frog workshop with four hours of classroom training, which allows them to replace four hours of Sierra Nevada yellow-legged frog specific survey experience with four hours of other listed frog experience. Applicant A has 20 hours of positive Sierra Nevada yellow-legged frog survey experience and 20 hours of positive foothill yellow-legged frog survey experience.
2. **Classroom and field workshop and surrogate species.** Applicant B successfully completed a Service-approved Sierra Nevada yellow-legged frog workshop with four hours of classroom training and four hours of positive survey experience. Additionally, Applicant B has 16 hours of positive Sierra Nevada yellow-legged frog survey experience, 4 hours of positive foothill yellow-legged frog experience, and 16 hours of positive mountain yellow-legged frog survey experience.
3. **Negative survey hours.** Applicant C has 36 hours of positive Sierra Nevada yellow-legged frog survey experience and four hours of negative Sierra Nevada yellow-legged frog survey experience.
4. **Classroom and field workshop, negative survey hours, and surrogate species.** Applicant D successfully completed a Service-approved Sierra Nevada yellow-legged frog workshop with four hours of classroom training and four hours of positive survey experience. Additionally, Applicant D has 12 hours of positive Sierra Nevada yellow-legged frog survey experience, four hours of negative Sierra Nevada yellow-legged frog survey experience, and 20 hours of positive mountain yellow-legged frog survey experience.