FAQs for Leona’s Little Blue Butterfly
June 2015
By Matt Baun

Q. What is the decision being made?
A. The U.S. Fish and Wildlife Service today announced that Leona’s Little Blue Butterfly is not warranted for ESA protections at this time. After a thorough evaluation of the best information and data available, the Service concluded that the stressors potentially affecting Leona’s Little Blue Butterfly populations do not rise to the level of a threat such that listing is warranted.

Q. How did you decide LLBB isn’t warranted for federal protection?
A. The ESA sets forth procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. The questions in this case are two-fold: Is LLBB in danger of going extinct, and/or is it likely to become endangered in the foreseeable future? In making this determination, the Service evaluated the Leona’s Little Blue Butterfly for various stressors including impacts from wildfire, climate change, timber management, fire suppression, invasive plants, encroachment of lodgepole pine and effects associated with small and isolated populations.

Q. The petitioners claim that there are very few butterflies around, so why isn’t small population size considered a threat?
A. Studies since the petition provide information that increased the range of the species (6 sq. mi to 12.8 sq. mi) and the population estimate (from 1,000—2,000 to 20,000).

Q. Why isn’t Timber Harvest a threat?
A. Timber management acts as a low-level stressor on LLBB and its habitat. The limited scope and low severity of the stressor suggest that this is not a considerable source of loss of individuals or habitat. Rather, timber management provides disturbance that promotes habitat for the butterfly.

Q. Did you address the threat of fire?
A. Yes. There are two types of fires that may impact LLBB: wildfire and prescribed fire. Wildfires are not planned fire events, but are started by natural events (i.e. lightning) or non-natural sources (e.g., arson, machinery, power lines, etc.). Prescribed fires are burn operations that follow a prescription dictating proper fuel and weather conditions that allow for control of fire severity, intensity, and rate of spread per stated management objectives. Prescribed fire can occur in many forms ranging from burning material piled after timber harvest to broadcast burning in which large areas are burned over a series of days. The petition claims that catastrophic fire is a serious potential impact to LLBB; our assessment, including information from a fire ecologist who visited the site, finds that fire (both wildfire and prescribed fire) has an overall low-level impact to LLBB and its habitat. There is no evidence of past catastrophic fire in the species’ range; this is not expected to occur in the future either due to low fuel loadings and the mosaic of open and forested areas that reduce the risk of stand replacing fire and/or fire within occupied habitat.
Q. What about the impacts of suppressing fire?
A. Fire suppression activities would not impact all habitats at any one time. The amount of area impacted during any one event would depend upon the fuels present and tactics employed to control fire spread. Ground disturbance is beneficial for the colonization of spurry buckwheat (the larval host plant for LLBB). Similarly, areas that opened up due to the felling or limbing of trees could result in more areas suitable for LLBB host and nectar plants. The overall severity from fire suppression as a stressor is low. Severity is low because fire history indicates that fires are small and infrequent, therefore the impacts are not expected to impact large areas of occupied habitat. Beneficial effects from ground disturbance and tree felling will promote colonization of spurry buckwheat, which will create or enhance habitat for LLBB.

Q. Why isn’t Climate Change a threat?
A. Climate change may be acting as a low- to moderate-level stressor on LLBB and its habitat. Climate change is projected to result in factors that will change plant phenology and vegetation composition over time, which may shift the timing of LLBB habitat use and reduce the overall suitability of the habitat. However, given the uncertainty of projected climate change impacts within the species range it is unknown if it will result in considerable loss of habitat or individuals.

Q. The petitioners identified lodgepole pine encroachment as a major threat – what did you find?
A. Our assessment finds that this stressor has an overall moderate-level of impact to LLBB and its habitat. However, timber management activities maintain open habitats favored by the host plant and LLBB.

Q. Are invasive plants an impact?
A. Invasive plants may be a low- to moderate-level stressor acting on LLBB and its habitat. Cheatgrass, though not widespread, is known to occur within the species range. Similarly, it is not known if cheatgrass is a recent arrival to the area or if it was present when LLBB was discovered. Local botanists are uncertain whether cheatgrass is able to spread very far or very fast on the pumice soils that occur within the LLBB range; therefore, we are uncertain about the future spread of cheatgrass.

Q. What are you doing to Conserve LLBB?
A. We have been working with the USFS on conservation of LLBB and its habitat on lands they own. The USFS has added LLBB and its habitat to its list of Sensitive Species. With its status as a Sensitive Species, any management actions within USFS lands will avoid or minimize project-related impacts to provide for conservation of the species and its habitat. The majority of the habitat is owned by a timber conglomerate that purchased the property early in 2015. Although the new landowner has not shown interest in working on a conservation agreement, we will continue to try to work with the company to pursue such an agreement.