## 2025 State Wildlife Action Plan (SWAP) Review and Revision

### Description of Species of Greatest Conservation Need (SGCN) Selection Criteria

Species considered for inclusion as SGCN had to be verified as being present within, or not confirmed as extirpated from, the state (determined using distribution information in the Biota Information System of New Mexico [BISON-M]; <a href="www.bison-m.org/">www.bison-m.org/</a> and NatureServe Explorer <a href="https://explorer.natureserve.org/Search">https://explorer.natureserve.org/Search</a>) and meet at least one of the following conditions:

**Climate Change Vulnerability:** Species that are less likely to be able to acclimate to changing climate conditions.

**Decline:** Species that either are currently experiencing or have historically experienced a substantial long-term decline in habitat or numbers.

**Disjunct:** Species that have populations geographically isolated from other populations of the same species and are thereby disproportionately susceptible to local decline or extirpation.

**Endemic:** Species that are limited to New Mexico.

**Keystone:** Species that are of demonstrable importance for ecosystem function (Cottee-Jones and Whittaker 2012). These species may contribute more to the conservation of biological diversity, through their impacts on other species, than expected based on their relative abundance and their removal is likely to lead to a reduction in species diversity or change in community structure or dynamics.

**Vulnerable:** Species for which some aspect of their life history and ecology makes them disproportionately susceptible to decline within the next 10 years. Factors include, but are not limited to, concentration to small areas during migration or hibernation; low reproductive rates; susceptibility to disease, habitat loss, wildfire, and anthropogenic overexploitation.

All SGCN had to meet the following criterion:

**Core Range**: New Mexico represents a substantive portion of the species' range; the species is found in multiple counties in New Mexico or, if it is only found in one county at the edge of the state, New Mexico still represents approximately 10% or more of the species' range. Also excludes species found in one or two counties on the border with Arizona or Texas for which Arizona or Texas populations, respectively, are stable.

Some species met at least one of the above conditions but were not considered as SGCN because (1) they are rarely present in the state; (2) they were introduced to New Mexico (i.e., not part of the state's native fauna); (3) they are legally harvestable with statutory protection as game animals or sport fish (EXCEPTIONS are species that are also designated as Threatened or Endangered at the state or federal level, have limited distribution in New Mexico, or are keystone species); (4) they are common or abundant across their distribution, or widespread, in New Mexico; (5) they have a stable population, expanding distribution, or there are no known threats to the species; (6) their taxonomy is questionable; (7) they do not breed or winter in the state or are vagrants (relevant for migratory species only); or (8) they are arthropods over which the Department does not have regulatory authority (EXCEPTIONS: recognizing the important ecological role of pollinating insects, specific species in the following four orders of insects identified as containing pollinators have been included as SGCN: Coleoptera, Diptera,

Hymenoptera, Lepidoptera [Wardhaugh 2015]). SGCN selection and exclusion criteria were crosswalked to information available in BISON-M and a query was developed to capture species in BISON-M responsive to the criteria. The resulting list was thoroughly reviewed by Department biologists and members of the SWAP core team and appropriate revisions made. Once species were selected as SGCN, they were grouped into four categories to reflect current conservation activities and guide future conservation actions implemented to benefit these species (Table 1).

Table 1. Categories of Species of Greatest Conservation Need (SGCN).\*

# **Current Focal Species (F)**

These are species for which, based on their status, population trends, or other factors, the Department is currently either implementing conservation actions (including active monitoring) or anticipating the need for conservation work in the next 10 years. This may include species that are Proposed or Candidates for listing as Threatened or Endangered under the Endangered Species Act (ESA) or for which there is a potential that the species may be uplisted from Threatened to Endangered or, conversely, downlisted. Implementing conservation actions for these species may preclude the need for federal listing or uplisting or may support downlisting. The Department recognizes the importance of species in other SGCN categories and will shift focus to these species as new information and opportunities arise.

### **Conservation Impact Species (I)**

This category includes species where conservation action taken in New Mexico is likely to have a substantive, positive outcome for the species or their associated ecosystems (e.g., actions focused on keystone species). This may include endemic/geographically-restricted species and habitat specialists that utilize specific patches of habitat that are either narrowly-distributed or highly disjunct (e.g., vertical cliffs, river/arroyo banks, waterfalls, talus slopes, established burrows/cavities). Conservation of specific habitats may be especially beneficial for these species. This category may also include species that are impacted by threats that can be more readily addressed (e.g., removal of an invasive species that is not yet well established, implementation of a conservation easement in an area containing important habitat features). It may also include resident species, that carry out their full life cycle in New Mexico, and are therefore less subject to threats experienced in other states or countries.

#### **Data Needs Species (D)**

This category includes species for which the primary conservation need is to obtain additional biological data and information. More data are needed to understand the current status and ecology of these species within New Mexico and/or rangewide and identify specific conservation needs and actions. Implementing new, or updating outdated, survey or monitoring efforts will be especially beneficial for these species. The Department will re-evaluate the appropriateness of Data Needs Species remaining in this category and on the SGCN list as new information becomes available.

#### **Limited Conservation Opportunity Species (L)**

These species are of documented conservation need but the potential for conservation actions

taken in New Mexico to have a substantive impact on a species' conservation status rangewide is limited. This category may include species that are of conservation concern (e.g., they have been listed as Threatened or Endangered under the ESA or at the state level) and occur in New Mexico but most individuals or breeding populations are in other states or countries or the species is in New Mexico for a limited portion of their annual cycle. It may also include species for which substantive resources and protections may already be available in other states or at the federal level, reducing the need for use of State Wildlife Grant funds for these species in New Mexico. Also included are species where public agencies face access or other logistical issues or where the primary threats may be harder to address locally (e.g., climate change impacts not thoroughly addressed with local adaptation actions). Coordination with other states or countries on regional conservation activities may be the most impactful action to take for these species.

\*Species that are state or federally listed as Threatened or Endangered may fall in any category. Reference to listing status in any category description is not intended to limit that category to species with a particular listing status.

A total of 499 species were selected to be SGCN for the 2025 SWAP. The Department has no regulatory authority for implementing conservation or management actions for arthropods but recognizes the important ecological role of pollinating insects. Thus, pollinating insects were considered in the SGCN selection process; this 2025 SWAP represents a statewide plan intended to inform conservation actions taken not only by the Department, but also by its many partners in conservation work to benefit SGCN. Fourteen species identified as SGCN in the 2017 SWAP were removed from the list and 278 other species were added. Many of the additions to the 2025 list of SGCN were pollinating insects (arthropods not included in the 2017 SWAP) and birds, which is also the most diverse taxonomic group evaluated in the 2025 SWAP revision and a group for which substantive new information on conservation status has become available since 2017. Fish (59%) and amphibians (20%) contained the highest proportions of their SGCN in category F (i.e., species currently, or anticipated to be, the focus of conservation action by the Department). All pollinating beetles and flies and the majority of crustaceans (84%), pollinating bees (65%), and amphibians (56%) known (based on data in BISON-M) to occur in New Mexico are identified as SGCN. Conversely, only 11% of pollinating moths, 31% of mammals, and 34% of reptiles in New Mexico are SGCN. Overall, 33% of all known New Mexico vertebrates, molluscs, crustaceans, and pollinating insects (i.e., 499 of 1,524 total species) were designated as SGCN. The 2025 SGCN represent 8% of all animal species known to occur in New Mexico (i.e., 499 of 5,972 total species).

The Department does not have authority to conserve or manage plants. Plant species in need of conservation are identified and listed as endangered by the Endangered Plant Program at the New Mexico Energy, Minerals, and Natural Resources Department (<a href="https://www.emnrd.nm.gov/sfd/rare-plants/">https://www.emnrd.nm.gov/sfd/rare-plants/</a>). New Mexico currently has 46 such state-endangered species. New Mexico also supports 235 rare and endangered plants as described in the New Mexico Rare Plant Conservation Strategy (NMRPCS; <a href="https://nhnm.unm.edu/botany/nm\_rare\_plant\_conservation\_strategy">https://nhnm.unm.edu/botany/nm\_rare\_plant\_conservation\_strategy</a>). Entities implementing conservation actions to benefit animal SGCN identified in this plan are encouraged to also

consider including any local state-endangered or NMRPCS species in their project design. Conservation activities beneficial for plants are outlined in the NMRPCS.

## **Description of Spreadsheet Available for Public Comment**

2025 SGCN List.xlsx – File containing the draft list of 499 SGCN for the 2025 SWAP. File includes the SGCN selection criteria that each species met and the category (see Table 1 above) to which each species has been assigned. Also indicates whether each species was on the SGCN list for the SWAP approved by U.S. Fish and Wildlife Service in 2017.

#### References

Cottee-Jones, H. E. W., and R. J. Whittaker. 2012. The keystone species concept: a critical appraisal. Frontiers of Biogeography 4(3):117-127.

Wardhaugh, C.W. 2015. How many species of arthropods visit flowers? Arthropod-Plant Interactions DOI 10.1007/s11829-015-9398-4.