

Enclosure 2 - Endangered Species Act Guidance
Request for Additional Information
August 2025

Carbon TerraVault Holdings LLC (CTV) II Project
Underground Injection Control (UIC) Permit Application
Class VI Pre-Construction Permit Application No. R9UIC-CA6-FY22-4.1-4.5

The Endangered Species Act (ESA) requires federal agencies to ensure that its actions are not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat. In accordance with 50 CFR Part 402, EPA must make a determination, in consultation with the U.S. Fish and Wildlife Service (USFWS), based on the best available information, whether there are any potential effects from the proposed project/permit to endangered or threatened species that may be found in the Action Area. To assist with that determination, we request that CTV submit a draft Biological Evaluation (BE) to EPA for review. The earlier in the permit review process that this material is provided to EPA the better positioned EPA is to meet statutory and regulatory requirements under ESA and ensure a timely review of permit applications.

The draft BE should contain the following:

A. Executive summary

- a. Brief summary of the project (2-3 sentences).
- b. Summary table of the species within the Action Area and the recommended effect determinations.

B. Action, Activities, and Action Area

- a. A description of the [action](#), meaning all activities or programs of any kind that are likely to occur as a result of the federal action (i.e. issuing the permit), including construction and operation of the facility. The action description shall include, but is not limited to:
 - i. Purpose of the action;
 - ii. Duration and timing of the action;
 - 1. When would the action start and end?
 - 2. If there are phases, when would each begin and end?
 - 3. Are there aspects of the action that will be ongoing (maybe in perpetuity), such as operations & maintenance?
 - iii. Location of the action and related activities;
 - iv. Specific components of the action and how they will be carried out;
 - v. Maps, drawings, blueprints, etc. of the action;
 - vi. Any other available information.
- b. A detailed description of the location of the action and identification of the Action Area.
 - i. The Action Area is defined as all areas to be affected directly or indirectly by the UIC permit and not merely the immediate area involved in the action; therefore, the Action Area should include staging and laydown areas, access routes, disposal areas, connected infrastructure, areas of ground

disturbance due to construction, etc. Note that the Area of Review is not the same as the Action Area.

- ii. Include a map of the Action Area.
- c. Include a summary table of the action and its direct effects, indirect effects, and cumulative impacts of future State, private, and non-Federal activities that are reasonably certain to occur within the Action Area. Include the following column headings:
 - i. Activities (what);
 - ii. Tool/ method (how);
 - 1. I.e. Hand tools? Heavy equipment? Explosives? Etc.
 - iii. Expected change to land, water, or air;
 - 1. I.e. what are the stressors and consequences?
 - 2. Include all indirect effects, such as noise, smells, dust, land use changes, and traffic patterns.
 - iv. What is the extent of change;
 - 1. When and where within the Action Area.
 - 2. Calculate the extent of the noise impacts.
 - v. Conservation measure to reduce stressor;
 - 1. What can be done to reduce species exposure to stressors or mitigate species response to exposure.
- d. List of all off-site use areas and locations.
- e. Other relevant information (e.g. existing or upcoming environmental assessment (EA) or environmental impact statement (EIS) related to the project or in the vicinity, related federal permits, existing Incidental Take Permit or species conservation plans implemented in the area).

C. Environmental baseline

- a. Provide a detailed description of the environmental baseline.
- b. Environmental baseline refers to the condition of the listed species or its designated critical habitat in the Action Area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the Action Area that have already undergone completed formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.

D. Impact to Threatened and Endangered Species

- a. To identify the listed species and critical habitats that may occur in the Action Area:
 - i. For the species under the USFWS jurisdiction, you can obtain a current report from the Information for Planning and Consultation database (IPaC), <https://ecos.fws.gov/ipac/>.
 - ii. If the Action Area includes areas where species are under National Marine Fisheries Service (NOAA Fisheries) jurisdiction, you will also need a species list from NOAA Fisheries. The IPaC report should be provided as an attachment to the draft BE.

- b. Include a summary table of each species (including proposed species and candidate species) and critical habitat that may occur in the defined Action Area with the following column headings:
 - i. Common Name
 - ii. Latin Name
 - iii. Federal Status (*Endangered, threatened, proposed threatened, or federal candidate*)
 - iv. Critical Habitat (*yes/no*)
 - v. Determination of Effects recommendation (*No Effect, Not Likely to Adversely Affect, or Likely to Adversely Affect*)
 1. “No effect” means there will be no impacts, positive or negative, to listed or proposed species. Generally, this means no listed species will be exposed to action and its environmental consequences. Concurrence from the USFWS is not required.
 2. “May affect, but not likely to adversely affect” means that all effects are beneficial, insignificant, or discountable. Beneficial effects have contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact and include those effects that are undetectable, not measurable, or cannot be evaluated. Discountable effects are those extremely unlikely to occur. These determinations require written concurrence from the USFWS.
 3. “May affect, and is likely to adversely affect” means that listed species are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure. These determinations require formal consultation with USFWS.
- c. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action but that are not part of the action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.
 - i. Consider any stressors from the proposed action that could alter (increase or decrease the quantity or quality of) resources the species uses for breeding, feeding, or sheltering.
 - ii. If there are no species or critical habitat present in the Action Area, no effect determination may be made.
- d. For each species and critical habitat that may occur in the defined Action Area, describe the physical and biological features (PBFs) of the species and critical habitat, describe the potential effects, and provide a recommended effects determination.
 - i. Include the resource needs, the biology / lifecycle of the species, and describe the condition of designated or proposed critical habitat in the Action Area. List the PBFs that may be affected by the proposed action.

1. PBFs include space, food, water, air, light, shelter, breeding sites, and protected or representative habitats.
 2. For more information regarding the description of species and critical habitat, see the FWS Environmental Conservation Online system (<https://ecos.fws.gov/ecp/>), the NOAA Fisheries Species Directory, other federal or state resource agencies, expert opinions, literature, relevant environmental reports, or scientific publications.
- e. It may be useful to seek technical assistance from the FWS and/or the NOAA Fisheries to understand the potential effects to each species and critical habitat.
 - f. In addition, CTV may need to hire a consultant or biologist to assist with analysis of potential effects to each species and critical habitat. Surveys could be conducted for essential PBFs of critical habitat using most recent updated survey protocols and should be during the season the species are most likely to be detected.
 - i. Species Survey: Determine if a species is present during the life of your project. Consider life stages, sexes, numbers, and time of year life stages of the species are present in the Action Area.
 1. Note that species surveys are only useful if they are conducted in recent history during a time when a species is likely to be present; just because a species is not observed during a survey does not mean it isn't present.
 - ii. Habitat Survey: Determine the composition, quality and use of habitat for nesting, breeding, dispersing, and migration behaviors. For critical habitat, look for PBFs and assess condition.

E. References

- a. Include a references section including any personal communications.