PROJECT INFORMATION

Project Title:	Synergia Ranch and Retreat Forest Vegetation Management
Project Type:	FOREST VEGETATION MANAGEMENT/RESTORATION
Latitude/Longitude (DMS):	35.490163 / -106.095601
County(s):	SANTA FE
Project Description:	Synergia Ranch and Retreat Forest Vegetation Management

REQUESTOR INFORMATION

Project Organization:	
Contact Name:	Kristin Dowling
Email Address:	kzcorling@gmail.com
Organization:	The E-Quest Corporation
Address:	PO Box 209, Frisco CO 80443
Phone:	360-772-1837

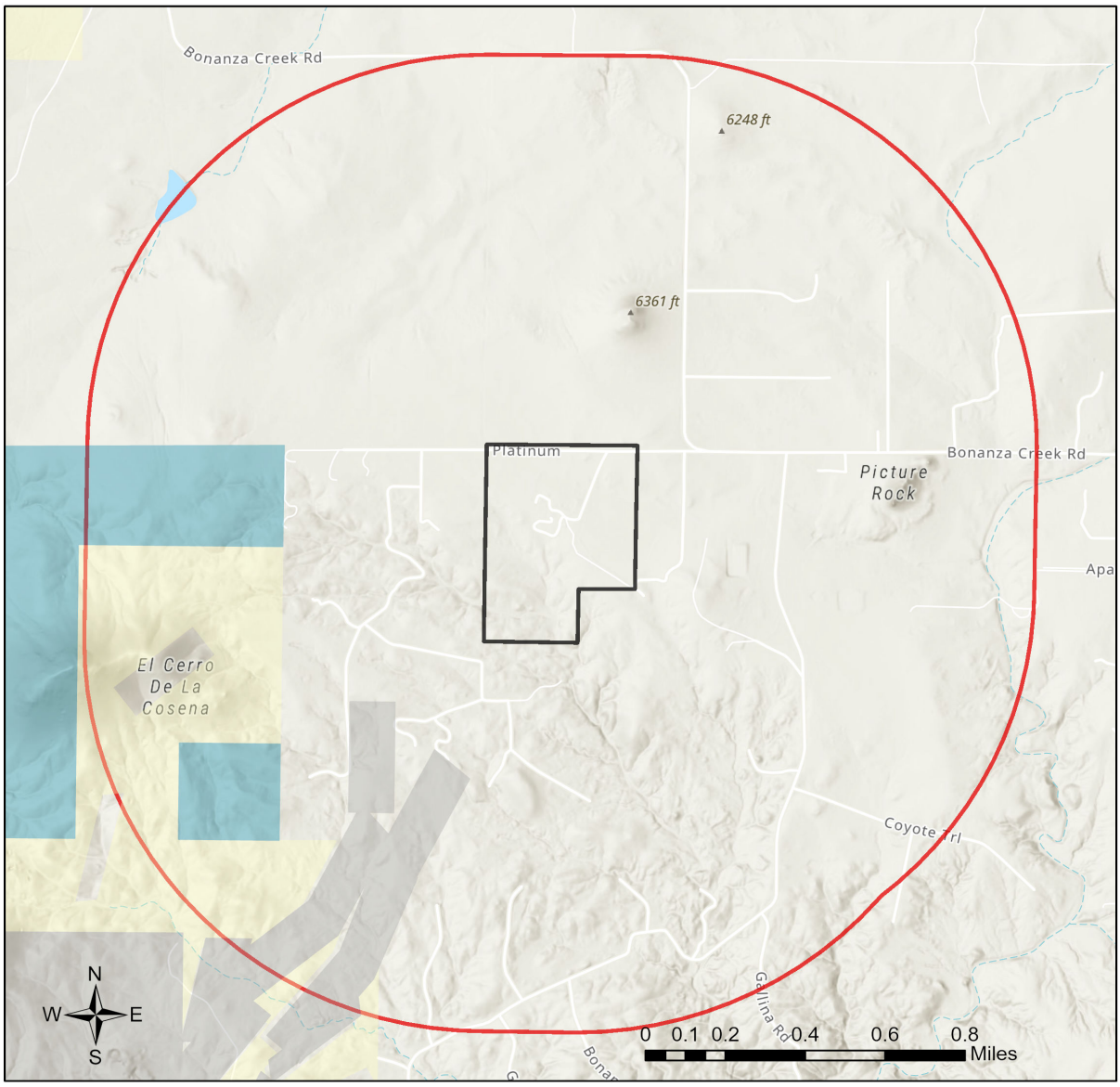
OVERALL STATUS

This report contains an initial list of recommendations regarding potential impacts to wildlife or wildlife habitats from the proposed project; see the Project Recommendations section below for further details. Your project proposal is being forwarded to a New Mexico Department of Wildlife (Department) biologist for review to determine whether there are any additional recommendations regarding the proposed actions. A Department biologist will be in touch within 30 days if there are further recommendations regarding this project proposal.

About this report:

- This environmental review is based on the project description and location that was entered. The report must be updated if the project type, area, or operational components are modified.
- This is a preliminary environmental screening assessment and report. It is not a substitute for the potential wildlife knowledge gained by having a biologist conduct a field survey of the project area. Federal status and plant data are provided as a courtesy to users. The review is also not intended to replace consultation required under the federal Endangered Species Act (ESA), including impact analyses for federal resources from the U.S. Fish and Wildlife Service (USFWS) using their Information for Planning and Consultation tool.
- This report contains information on wildlife species protected under the ESA and the Wildlife Conservation Act (WCA), Species of Greatest Conservation Need (SGCN) (page 18, table 5), and Species of Economic and Recreational Importance (SERI). Species listed under the ESA are protected from take at the federal level and under the WCA are protected from take at the state level. SGCN are identified in the State Wildlife Action Plan (SWAP) for New Mexico; all of these species are considered to be of conservation concern but not all of them are protected from take at the state or federal level. The harvest of all SERI is regulated at the state level. The Department has no authority to designate critical habitat for species listed under the WCA; only the USFWS can designate critical habitat for species listed under the ESA.
- The New Mexico Environmental Review Tool (ERT) utilizes species observation locations and species habitat suitability models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report cannot guarantee species presence or absence within your project area. To determine occurrence of any species listed in this report, or other wildlife that may be present within your project area, onsite surveys conducted by a qualified biologist during appropriate, species-specific survey timelines may be necessary. Any surveys including handling or capturing wildlife may require a scientific collection permit; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information.
- The Department encourages use of the ERT to modify proposed projects for avoidance, minimization, or mitigation of wildlife impacts. However, the ERT is not intended to be used in a repeatedly iterative fashion to adjust project attributes until a previously determined recommendation is generated. The ERT serves to assess impacts once project details are developed. The New Mexico Crucial Habitat Assessment Tool, the data layers from which are included in the ERT, is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.

Synergia Ranch and Retreat Forest Vegetation Management



- Buffered Project Boundary
- Project_Boundary
- Bureau of Land Management
- City Land
- County Land
- Department of Defense
- Department of Energy
- National Park Service
- NM Department of Game & Fish
- NM State Forestry Division
- NM State Parks
- Other Federal Agency
- Other Federal Agency
- State Land Office
- State of New Mexico
- Tribal Land
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation
- U.S. Department of Agriculture
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- U.S. Natural Resources Conservation Service

NHNM, USGS, USFS, US Census Bureau, NMDGF
Esri, NASA, NGA, USGS, FEMA
Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDOW (WCA)	NMDOW SGCN/SERI	USFS	USFS SCC	BLM
Boreal Chorus Frog	Pseudacris maculata			SGCN			
Aplomado Falcon	Falco femoralis		E	SGCN			
Peregrine Falcon	Falco peregrinus		T	SGCN			BLM WATCH
Mountain Plover	Anarhynchus montanus			SGCN	Sensitive Species		BLM WATCH
Flammulated Owl	Psiloscops flammeolus			SGCN			BLM WATCH
Western Burrowing Owl	Athene cunicularia hypugaea			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Mexican Spotted Owl	Strix occidentalis lucida	LT		SGCN 2025			
Common Nighthawk	Chordeiles minor			SGCN			
Lewis's Woodpecker	Melanerpes lewis			SGCN		USFS R3 SCC	BLM WATCH
Williamson's Sapsucker	Sphyrapicus thyroideus			SGCN			
Olive-Sided Flycatcher	Contopus cooperi			SGCN			
Pinyon Jay	Gymnorhinus cyanocephalus			SGCN		USFS R3 SCC	BLM SENSITIVE
Clark's Nutcracker	Nucifraga columbiana			SGCN			
Juniper Titmouse	Baeolophus ridgwayi			SGCN		USFS R3 SCC	BLM WATCH
Pygmy Nuthatch	Sitta pygmaea			SGCN			
Western Bluebird	Sialia mexicana			SGCN			
Mountain Bluebird	Sialia currucoides			SGCN			
Loggerhead Shrike	Lanius ludovicianus			SGCN		USFS R3 SCC	BLM WATCH
Gray Vireo	Vireo vicinior		T	SGCN	Sensitive Species	USFS R3 SCC	BLM WATCH
Virginia's Warbler	Leiothlypis virginiae			SGCN			BLM SENSITIVE
Black-Throated Gray Warbler	Setophaga nigrescens			SGCN			BLM WATCH
Chestnut-Collared Longspur	Calcarius ornatus			SGCN			BLM SENSITIVE
Cassin's Finch	Haemorhous cassinii			SGCN			BLM WATCH

Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDOW (WCA)	NMDOW SGCN/SERI	USFS	USFS SCC	BLM
Evening Grosbeak	Coccothraustes vespertinus			SGCN			
Spotted Bat	Euderma maculatum		T	SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Black-Tailed Prairie Dog	Cynomys ludovicianus			SGCN	Sensitive Species		BLM SENSITIVE
Gunnison's Prairie Dog	Cynomys gunnisoni			SGCN	Sensitive Species		BLM SENSITIVE
New Mexican Meadow Jumping Mouse	Zapus hudsonius luteus	LE	E	SGCN	Sensitive Species		BLM SENSITIVE
Mountain Lion	Puma concolor			SERI			
Elk	Cervus canadensis			SERI			
Pronghorn	Antilocapra americana			SERI			
Desert Massasauga	Sistrurus catenatus edwardsii			SGCN			

Common Name hyperlink takes you to species account in bison-m.org; Scientific Name hyperlink takes you to information in NatureServe Explorer; ESA = Endangered Species Act, C = Candidate, LE = Listed Endangered, LT = Listed Threatened, XN = Non-essential Experimental Population, for other ESA codes see this website; WCA = Wildlife Conservation Act, E = Endangered, T = Threatened; SERI = Species of Economic and Recreational Importance; SGCN = Species of Greatest Conservation Need; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.

Project Recommendations

Your proposed project activities may require a custom review for assessment of potential effects to wildlife. See the "OVERALL STATUS" section above to determine the likelihood that your project will be reviewed further based on its location. A Department biologist will confirm whether any additional conservation measures are needed. You should expect to receive any additional project recommendations within 30 days of your project submission. If the "OVERALL STATUS" section indicates that no further consultation with the Department is required based on its location, then you will only receive additional project feedback from the Department if a biologist deems it necessary.

All migratory birds are protected against direct take under the federal Migratory Bird Treaty Act (16 U.S.C. Sections 703-712), and hawks, falcons, vultures, owls, songbirds, and other insect-eating birds are protected under New Mexico State Statutes (17-2-13 and 17-2-14 NMSA), unless permitted by the applicable regulatory agency. To minimize the likelihood of adverse impacts to migratory birds, nests, eggs, or nestlings, the Department recommends that ground disturbance and vegetation removal activities be conducted outside of the primary migratory bird breeding season of April 15-September 1. Breeding season may begin earlier for raptors or when working in low-elevation habitats such as deserts. If ground-disturbing and clearing activities must be conducted during the breeding season, the area should be surveyed for active nest sites (with birds or eggs present in the nesting territory) and avoid disturbing active nests until young have fledged. For active nests, establish adequate buffer zones to minimize disturbance to nesting birds. Buffer distances should be at least 100 feet from songbird and raven nests; 0.25 miles from most raptor nests; and 0.5 miles for ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos canadensis*), peregrine falcon (*Falco peregrinus*), and prairie falcon (*Falco mexicanus*) nests. Active nest sites in trees or shrubs that must be removed should be mitigated by qualified, permitted biologists or wildlife rehabilitators. Department biologists are available to consult on nest site mitigation and can facilitate contact with qualified personnel. Removal of active nests of state-protected species may require a scientific collection permit; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information.
The list of New Mexico SGCN (see link, page 14, table 5) and the federal list of Birds of Conservation Concern should be reviewed to fully evaluate potential effects to migratory birds from your proposed project. Federal agencies are also required under Executive Order 13186 to implement standards and practices that lessen the amount of unintentional take attributable to agency actions. These conservation measures are strongly recommended to ensure persistence of migratory bird species whose populations are small and/or declining within New Mexico.

For projects involving the use of herbicide application, the Department has the following recommendations to mitigate impacts to wildlife:

- To mitigate the potential for herbicide drift into sensitive aquatic and native riparian habitats, the Department recommends applying a minimum buffer of 20 ft (for spot applications), 100ft (if using ground application), 350 ft (if using low-altitude aerial spraying), or 1,320 ft (if using high-altitude aerial spraying; USFWS 2007) around all aquatic habitats and native riparian vegetation in the proposed treatment area.
- To mitigate the potential for herbicide drift into sensitive habitats for federally or state-listed species, the Department recommends applying a minimum buffer of 10 ft (for spot applications), 90 ft (if using ground application), 300 ft (if using low-altitude aerial spraying), or 1,320 ft (if using high-altitude aerial spraying) around all known terrestrial habitats for federally or state-listed species. Buffer distances are larger for insect pollinators of federally or state-listed plants (2,640 ft for small pollinators, 10,560 ft for large pollinators such as bumble bees) (USFWS 2007).
- Use mechanical weed removal techniques or individual plant treatments when buffers cannot be implemented and federally or state-listed species habitats are present.
- Apply herbicides directly to target plants, rather than broadly to large areas, whenever possible to avoid harming nearby non-target or native vegetation.
- Avoid herbicide spraying on days when wind speeds are high (> 10 mph) and on days when rain is expected within 48 hours.
- Apply herbicides no later than two months before normal spring runoff and high-water tables are anticipated in the project area and wait until streamflow is back below normal bank-full stage to consider applying herbicides in the late summer or fall.
- Use the lowest concentration possible that will still allow for achievement of the desired result.
- Avoid applying herbicides to and removing vegetation that is being used by birds for nesting. When nesting birds may be present in target vegetation in the project area, herbicides should be applied outside of the breeding bird season (April – September).
- In areas dominated by undesired or non-native plants, habitat loss may occur if herbicide is applied to the entire area, resulting in a total loss of vegetation. To avoid this, apply herbicides in a mosaic pattern, alternating treated and non-treated sites between years.
- The Department recommends not using herbicides that contain the following chemicals that have been found to be slightly to highly toxic to wildlife including birds, fish, and pollinators: 2,4-D, dichlobenil, dichlorprop, fluazifop, glyphosate, oxyfluorfen, propyzamide, quizalofop, sulfometuron, and triclopyr (Michael 2002).

For forestry and forest restoration projects, including fire management activities, occurring in ponderosa pine forests, the Department recommends following the Ponderosa Pine Restoration Guidelines to Benefit Wildlife. In addition to these restoration guidelines, the Department notes that for pollinating insects, some patches of open canopy with flowering forbs and shrubs can be important for foraging and logs and snags can be important for shelter and nesting and overwintering areas. Having both large and small undisturbed areas that are refugia from treatments, including thinning and burning, is important to protect these species. Limit each treatment to no more than one third of the target area to allow for larger undisturbed spaces.

For projects entailing prescribed burns, conduct prescribed burns in a mosaic of burned areas and unburned refugia, with unburned refugia representing at least 66% of the project area and including some smaller unburned patches at regular intervals (less than 1 kilometer spacing) within the treatment area. Smaller unburned patches can protect important resources for animals, including leaf litter for overwintering insects and flowering plants for foraging pollinators. Avoid high-intensity fires that can harm animals, including nesting and overwintering bees. Conduct burns when animals, including foraging bees, are less active and outside of the avian breeding season (i.e., potential burn season would be November-February). If burning during the active season (March-October), consider timing burns when ground-nesting bees are below ground (e.g., early morning, late evening) or in the warmer part of the day when adult butterflies and some other animals are more active and better able to escape. In grasslands, burning in the morning may increase burn heterogeneity and reduce soil heating, both beneficial for invertebrates. Allow time for site recovery and implement heterogeneous fire intervals. Buffer high biodiversity aquatic and riparian habitats from burned areas.

Burrowing owl (*Athene cunicularia*) may occur within your project area. Burrowing owls are protected from take by the Migratory Bird Treaty Act and under New Mexico state statute. Before any ground disturbing activities occur, the Department recommends that a preliminary burrowing owl survey be conducted by a qualified biologist using the Department's Burrowing Owl Survey Protocol. Surveys including audio calls may require a scientific collection permit; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information. Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations and information on any permitting requirements regarding relocation or avoidance of impacts.

The proposed project occurs near an important bat area. This area may contain important bat roosting resources, such as caves or mines, that potentially could be affected by certain project activities. Follow the guidelines below to minimize disturbance to roosting bats.

- Avoid use of pesticides, firearms, open-flame torches, or heavy smoke-producing equipment, especially from April through September.
- If artificial lighting is needed, use only light sources powered by batteries, or cyalume glow/light sticks. Keep the site clean by picking up refuse or materials from project lighting or operations whenever they are shut down.
- If the use of permanent outdoor lights cannot be avoided, design all outdoor lighting in accordance with the New Mexico Night Sky Protection Act, which requires that outdoor lighting be fitted with shielding that directs light downward, rather than upward or laterally, to prevent sky glow and associated impacts to bats.
- For any surface disturbing activities, the project footprint (including a 350 foot buffer) should avoid potential roost sites such as caves or mines, especially from April through July. Tree clearing activities and prescribed burns should include a minimum 0.5 miles buffer from any such features.
- If caves, mines, bridges, or other man-made structure suitable as potential bat roosts are encountered within the project area, they should not be entered during any time of year, and no roosting or hibernating bats should be contacted or disturbed. Report any dead or injured bats to the Department, which can facilitate contacts with other appropriate personnel.

Prairie dog colonies may occur within the vicinity of your project area. Both black-tailed prairie dogs (*Cynomys ludovicianus*) and Gunnison's prairie dogs (*Cynomys gunnisoni*) are designated as New Mexico SGCN, and their colonies provide important habitat for other grassland wildlife. Wherever possible, occupied prairie dog colonies should be left undisturbed, and all project activities should be directed off the colony. Any burrows that are located on the project site should be surveyed by a qualified biologist to determine whether burrows are active or inactive and whether burrowing owls may be utilizing the site. Colonies within the range of the black-tailed prairie dog can be surveyed by a qualified biologist diurnally, year-round using binoculars. Colonies within the range of the Gunnison's prairie dog can be surveyed by a qualified biologist diurnally, using binoculars during the warmer months from April through October and by searching for fairly fresh scat and lack of cobwebs or debris at the mouths of burrows during the cold months (November through March). If ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs, the Department recommends live-trapping and relocation of prairie dogs. A scientific collection permit may be required; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information. The Department can provide recommendations regarding suitability of potential translocation areas and procedures. If a project will only impact 10 or fewer burrows and there is a large, active colony adjacent to the site the continued existence of which will not cause future conflicts, the Department suggests use of reverse dispersal translocation methods as outlined in Creating Prairie Dog Management Plans Part three: Appendices and Attachments (see Attachment 1). Methods include setting up a wire door over active burrows followed by monitoring and closure of the few burrows in the project disturbance area after prairie dog evacuation and barrier installation to prevent recolonization of closed areas. Removal activities should be performed after the spring breeding and birthing seasons and prior to winter hibernation (e.g., mid-June to mid-November). Prairie dogs in southern New Mexico may remain active in the winter, extending the potential removal period beyond mid-November. Removal activities should also begin roughly one month before construction or other disturbance occurs as it can take between one week and one month for the animals to disperse.

The current project area appears to contain one or more wetland types as classified by the New Mexico Environment Department's Wetland Map. Information on wetlands in your project area can also be viewed on the ERT's Create Project/Map page. This key can assist in interpreting Landscape Position, landform, water flow path, and waterbody type (LLWW) codes in the ERT's wetland data. Wetlands provide important habitat for numerous species of wildlife and pollinators and provide ecosystem services, such as water filtration and storage, to downstream users. The Department recommends avoiding disturbance of wetlands whenever possible, avoiding actions or infrastructure installment that may disrupt natural wetland hydrological processes, and reseeding or replanting areas where disturbance cannot be avoided with native wetland plant species appropriate to the local wetland type. For a list of native seed providers, please see the Department's habitat handbook guideline for Restoration and Management of Native and Non-native Trees in Southwestern Riparian Ecosystems. For projects involving filling wetlands under federal jurisdiction, please contact the Army Corps of Engineers for more information on permits required under the Clean Water Act.

Disclaimers regarding recommendations:

- The Department provides technical guidance to support the persistence of all protected species of native fish and wildlife, including game and nongame wildlife species. Species listed within this report include those that have been documented to occur within the project area, and others that may not have been documented but are projected to occur within the project vicinity.
- Recommendations are provided by the Department under the authority of § 17-1-5.1 New Mexico Statutes Annotated 1978, to provide "communication and consultation with federal and other state agencies, local governments and communities, private organizations and affected interests responsible for habitat, wilderness, recreation, water quality and environmental protection to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users".
- The Department has no authority for management of plants or Important Plant Areas. The New Mexico Endangered Plant Program, under the Energy, Minerals, and Natural Resources Department's Forestry Division, identifies and develops conservation measures necessary to ensure the survival of plant species within New Mexico. Plant status information is provided within this report as a courtesy to users. Recommendations provided within the ERT may not be sufficient to preclude impacts to rare or sensitive plants, unless conservation measures are identified in coordination with the Endangered Plant Program.
- Additional coordination and/or consultation may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific mitigation recommendations may be proposed during ESA consultation and/or NEPA analyses or through coordination with affected federal agencies.
- Unless a project is marked as confidential in the title or description by the project proponent and if a ERT-generated report is the only response that the project proponent receives from the Department, then the report will be made publicly accessible via the Public Comment Letters page on the ERT website.