



Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of Sangamon County, Illinois, the City of Springfield, the Springfield Park District, and the Illinois Department of Natural Resources, authorization for the incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - *FGS*) in Sangamon County, Illinois [associated with the construction of Phase I of the Sangamon Valley Trail (SVT project) - along a portion of the abandoned Union Pacific Railroad Corridor on the west side of Springfield; as described/shown in the final conservation plan received by the Department on 13 April 2010] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the SVT Project in Sangamon County, Illinois.

Phase 1 of the Sangamon Valley Trail (SVT) is located on a portion of the abandoned Union Pacific Railroad corridor (formerly the Chicago and North Western Transportation Company) on the west side of Springfield in Sangamon County. The south termini will be at Bunker Hill Road along the south side of Centennial Park. The trail extends 5.5 miles to just north of the structure over the abandoned B&O railroad. A connector trail will extend east 0.3 miles along the abandoned B&O railroad corridor, then northeast into Stuart Park where it connects to an existing paved path. Phase I is located within the Springfield West and Farmingdale USGS 7.5' topographic quadrangles.

Adult Franklin's ground squirrels hibernate for long periods of time and typically are only active aboveground from mid-April to August. Breeding occurs shortly after the females emerge from hibernation and they give birth to a single litter from late May to mid-June. Litters typically consist of 6 to 9 pups, but can include as many as 13. In Illinois juveniles appear aboveground by mid-July. Juveniles do not enter hibernation until September or October. These diurnal squirrels vocalize with a sharp whistle; however, they are not readily observed in the tall, dense vegetation.

The activities that could possibly result in taking of the Franklin's Ground Squirrel (FGS) are the construction of the proposed SVT trail project, with the following associated actions: excavation for foundation/trail work, site grading and contouring, trench/trail excavation for any necessary utility services, and general heavy equipment use.

Procedural History

The Illinois Department of Natural Resources prepared a conservation plan for the SVT Project in Sangamon County, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDNR's request for authorization for incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - *FGS*) in Sangamon County, Illinois were received by the Illinois Department of Natural Resources (Department) on 13 April 2010. Public notice of IDNR's request for authorization of incidental take of these State listed species was published in the Arlington Heights/Northwest Daily Herald (Official State newspaper) and the State Journal Register (Springfield, IL.) on April 15, April 22, and April 29, 2010. Public comments on this conservation plan were accepted

by the Department until May 14, 2010. No public comments were received by the public during the period of April 15, 2010 through May 14, 2010.

Target Species

Franklin's Ground Squirrel/FGS (*Spermophilus franklinii*) - (Illinois) State Threatened

In Illinois, FGS prefer habitats with intermediate and tall grasses; they are not found in areas with short or mowed grasses. Cultivated land is rarely used by the diurnal squirrels, which are most often found in dense vegetation where there is limited mowing or grazing. The FGS often create burrows in elevated landscape features such as the elevated beds of railroad and road rights-of-way. Their burrows are fairly deep and well drained to be insulated from heat and cold and may have multiple entrance holes. One of the true hibernators, FGS sleep from about September to April with a body temperature just a few degrees over freezing. Right after coming out of hibernation, they breed and have a single yearly litter of 6-9 pups around early June.

FGS eat insects, green plants, seeds, fruit, amphibians, bird eggs, young birds and mammals, and carrion. Their principal predators are the red-tailed hawk, red fox, badger, coyote, striped skunk, mink, and long-tailed weasel. Their home range is usually 1.5-3 acres. At adolescence, male juveniles disperse for an unknown distance. In the wild, life expectancy is 4-5 years for females and 1-2 years for males. Even during spring and summer, the squirrels spend a majority of time in the burrow. As such, an important conservation practice will be to avoid the burrows, which have been identified during the field surveys.

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The activities that could possibly result in taking of the Franklin's Ground Squirrel (FGS) are the construction of the proposed SVT trail project, with the following associated actions: excavation for foundation/trail work, site grading and contouring, trench/trail excavation for any necessary utility services, and general heavy equipment use.

Phase 1 of the Sangamon Valley trail (SVT) will include development of 5.5 miles of the IDNR owned trail corridor as a shared-use trail with connections to both Centennial Park and Stuart Park. Sections of the railroad line with suitable vegetation and drainage occur in the corridor, but are interspersed with sections that are not suitable for use by the Franklin's ground squirrel (i.e., areas that are heavily wooded or closely mowed). Suitable areas within the corridor have

been identified by the Illinois Natural History Survey and appear in a supplemental report on file with the IDNR (Office of Realty and Environmental Planning).

Construction activity will occur primarily along the top of the railroad bed (approximately 20-35 feet wide), although there also will be staging areas for the heavy machinery used to prepare the trail. The upper 1-2 feet of soil will be removed from elevated sections of the existing railroad line so that the trail will be of the appropriate width to meet standards. Fill will be added to other sections to elevate the trail above the surrounding right-of-way. In addition, the rail bed will be cored out to a depth of approximately 1 foot to make space for crushed rock.

Franklin's ground squirrels and their burrows may be affected by these activities. A small loss of suitable habitat also will likely occur.

Overall, it is anticipated that construction activity may temporarily disturb Franklin's ground squirrels and that individual ground squirrels may potentially be harmed due to the use of heavy equipment and the removal of soil. Active individuals may be injured or killed directly by heavy machinery in the unlikely event that they are unable to escape from its path.

Hibernating animals would be at greatest risk since animals in burrows may be injured or killed if burrows are destroyed during the removal of soil from embankments. Removal of the top 1-2 feet of embankments and subsequent placement of crushed rock for the trail surface may also result in a small loss of suitable habitat for Franklin's ground squirrel.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

The majority of the permanent impact will be limited to the railroad bed itself, which covers about 20 feet of the 100-foot wide right-of-way. Temporary impacts during construction will be restricted to the erosion control limits in those segments of the right of way most suitable for the occurrence of the Franklin's ground squirrel. This will be achieved by placing temporary erosion control fencing during construction which will limit the area of impact to the designated width. The remaining area within the right-of-way will continue to be suitable for foraging or dispersal. Only portions of the rail bed currently provide suitable burrowing habitat for Franklin's ground squirrel. Staging areas for heavy machinery shall not be situated in suitable Franklin's ground squirrel habitat.

The majority of the project area is bordered by residential development. With the construction of the SVT bike trail, existing habitat for the Franklin's ground squirrel would be largely preserved. Construction activity also may enhance the suitability of other portions of the rail bed for the species. If the trail is not built, continued successional woody vegetative growth will create habitat that is unsuitable for the Franklin's ground squirrel.

In January, 2008 the Department of Natural Resources received the Final Judgment Order settling a condemnation lawsuit to acquire part of an in-holding property south of Iles Ave. and east of Lennart Road. In order to create a green-way buffer adjacent to the trail, the Department acquired a 100 foot wide strip of land which exceeds the minimum required to build the trail. This additional 3.59 acres land will help mitigate the effects of the proposed Phase 1 trail development by providing additional habitat that will not be developed for commercial or residential uses.

Construction activity will be scheduled to avoid periods when young FGS are vulnerable in burrows or when most animals are in hibernation. Trail construction activities will be restricted in sections that provide the most suitable burrowing habitat so that less soil is removed from the embankments. This would limit potential destruction of nest chambers within burrows and maintain suitable elevation for burrowing.

Phase 1 plans do not call for any trees to be removed along the main trail corridor. Selective pruning will be specified to provide a min.14 foot wide by 12 foot high clear space throughout the trail. Some tree removal will be required to construct the Stuart Park connector. Disturbed slopes of embankments will be seeded with herbaceous vegetation. Following construction of the trail, slopes of embankments will be managed to limit encroachment of woody vegetation, in zones most suitable for Franklin ground squirrel. Additional removal of trees from elevated portions of the rail bed may also increase the suitability of burrowing habitat for Franklin's ground squirrels.

*See Also: **Authorization Section** of this document for more details.

Habitat Requirements/Species Status:
Franklin's ground squirrel/FGS

Habitat Requirements

In Illinois, FGS prefer habitats with intermediate and tall grasses; they are not found in areas with short or mowed grasses. Cultivated land is rarely used by the diurnal squirrels, which are most often found in dense vegetation where there is limited mowing or grazing. The FGS often create burrows in elevated landscape features such as the elevated beds of railroad and road rights-of-way. Their burrows are fairly deep and well drained to be insulated from heat and cold and may have multiple entrance holes.

One of the true hibernators, FGS sleep from about September to April with a body temperature just a few degrees over freezing. Right after coming out of hibernation, they breed and have a single yearly litter of 6-9 pups around early June.

FGS eat insects, green plants, seeds, fruit, amphibians, bird eggs, young birds and mammals, and carrion. Their principal predators are the red-tailed hawk, red fox, badger, coyote, striped skunk, mink, and long-tailed weasel. Their home range is usually 1.5-3 acres. At adolescence, male juveniles disperse for an unknown distance. In the wild, life expectancy is 4-5 years for females and 1-2 years for males.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

Each remedy listed in the Conservation Plan (and this Incidental Take Authorization), e.g., restricted construction area(s), fencing, etc., are standard practices when working with environmental issues. Incorporating them into the construction plans will not cause any inordinate cost measure. Overall, funding in support of mitigation activities shall be folded into all grant requests for trail construction. Federal and State grants typically require a match to complete funding for construction, and all jurisdictions support the herein described mitigation requirements to satisfy preserving and protecting the Franklin's ground squirrel.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

The range of the Franklin's ground squirrel extends from northwestern Indiana, northern and central Illinois and southern Wisconsin west to northern Kansas, Nebraska, North and South Dakota in the United States and Manitoba, Saskatchewan, and Alberta in Canada. Hofmann (2008) documented Franklin's ground squirrels in 33 Illinois counties.

According to the Natural Heritage Database (Illinois Department of Natural Resources), known areas with Franklin's ground squirrels in Springfield close to the Sangamon Valley Trail include the N & S Railroad spur between Wabash Avenue and I-72 at its juncture with Cockrell Lane and the northwest corner of the intersection of Cockrell Lane and I-72. Franklin's ground squirrels were captured at these sites in 2007. In addition, Franklin's also were seen at Vredenburg Park in 2007.

On 11 March 2010, the Illinois Department of Natural Resources requested that the Illinois Natural History Survey (INHS) determine habitat suitability for the state-threatened Franklin's ground squirrel (*Spermophilus franklinii*) along the proposed Sangamon Valley Trail. On 25 March 2010, Jean Mengelkoch, Joyce Hofmann, and Joseph Merritt from the INHS walked the vast majority of the Sangamon Valley Trail alignment to assess the habitat.

Several (7) areas along the former railroad line that could provide suitable habitat for Franklin's ground squirrels. The first area is located in Centennial Park starting from the sledding hill (16S 263559mE, 4404484mN) to a point near the land bridge between the ponds (16S 263608mE, 4404587mN). The second area is just north of the first area from (16S 263793mE, 4404894mN) to the edge of the subdivision on the west side of the trail (16S 264009mE, 4405130mN). This area is just southwest of Lenhart Road. The third area covers most of the trail between Lenhart Road and Iles Avenue. Within this stretch there are a few small sections that would not need to be trapped, including the first 75m of trail south of Iles Avenue (too flat) and sections of the trail bordered by dense trees. The fourth area covers approximately the first 200m of trail northeast of Iles Avenue. The fifth area of suitable habitat is a small area of herbaceous vegetation at 16S 265252mE, 4406590mN. located at an opening between subdivisions on both sides of the trail south of Greenbriar Drive. The sixth area extends from 100m northeast to about 300m southwest of Archer Elevator Road. The seventh area extends from 100m north of Meadowbrook Road to 250m north of Meadowbrook Road.

In addition, two (2) sites with burrow entrances approximately the size of those used by Franklin's ground squirrels were located. The first site was immediately southeast of the trail's juncture with Lenhart Road. The area was mowed which is not typical habitat for Franklin's ground squirrel; however, the Franklin's seen at Vredenburg Park in 2007 also had burrows in mowed areas. This site was not included in the delineations of suitable habitat, but the area will be recommended for live trapping.

The second site where burrows were located occurred in mounds of soil on the south side of the trail roughly 300m southwest of Archer Elevator Road. This site is included in the sixth area listed as suitable habitat. Recommendations to the consultants/species experts involved in this project to trap this "second site" will (also) be made and the final decision to trap this area will be based upon their best professional judgement.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and official IDNR signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

The Illinois Department of Natural Resources prepared a conservation plan for the SVT Project in Sangamon County, Illinois as described by the Illinois Endangered Species Protection Act (520

ILCS 10/5.5). That plan and IDNR's request for authorization for incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - FGS) in Sangamon County, Illinois were received by the Illinois Department of Natural Resources (Department) on 13 April 2010. Public notice of IDNR's request for authorization of incidental take of these State listed species was published in the Arlington Heights/Northwest Daily Herald (Official State newspaper) and the State Journal Register (Springfield, IL.) on April 15, April 22, and April 29, 2010. Public comments on this conservation plan were accepted by the Department until May 14, 2010. No public comments were received by the public during the period of April 15, 2010 through May 14, 2010.

PROBABLE EFFECTS OF THE PROPOSED ACTION:

If present, it is likely that some FGS within the project area will experience temporary disturbance from noise and other related activities during construction. The construction activities could possibly result in death or injury to individuals that are within the construction corridor/area. This could include individuals in underground burrows in the line of the trenching activities or individuals that could be run over by heavy equipment. The intent of the Conservation Plan and subsequent ITA is to avoid all impacts to the extent practicable, and greatly minimize those impacts that cannot be avoided.

Authorization

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of Sangamon County, Illinois, the City of Springfield, the Springfield Park District, and the Illinois Department of Natural Resources, authorization for the incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - FGS) in Sangamon County, Illinois [associated with the construction of Phase I of the Sangamon Valley Trail (SVT project) - along a portion of the abandoned Union Pacific Railroad Corridor on the west side of Springfield; as described/shown in the final conservation plan received by the Department on 13 April 2010] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement.

The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the SVT Project in Sangamon County, Illinois. Further, it is our opinion that the take (disturbance/harassment/lethal take) authorized herein would not diminish the likelihood of the survival of either these aforementioned species (FGS) in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a period of **5 (five) years** after the first day of official public use/public access of the SVT trail by

the general public, unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].

2. If new information is discovered prior to or during construction that may impact the effectiveness of the approved Conservation Plan and this Incidental Take Authorization, the IDNR and Sangamon County (including any and all Environmental Subcontractors, Subconsultants and/or Construction Managers) shall have ten (10) business days to alter the plan appropriately. Sangamon County, the IDNR, and/or its subcontractors, shall then report to the IDNR with a description of the changed circumstances or new information and propose modifications to the plan - within 3 days (72 hours) of plan alteration.

3. Where appropriate, and not in interference with the primary function of the SVT trail, all areas now in natural vegetation, shall be reseeded with a native vegetation mix. Restoration in non-cultivated areas shall be completed using native species or based on Department recommendations where appropriate.

4. In relation to Condition #3 above, where appropriate and not in interference with the primary function of the SVT trail, erosion control methods will be implemented and monitored until successful establishment of newly planted vegetation. Formal erosion control inspections at the entire construction site (impact zone) shall be conducted at least once (1x) a month by an agent of the IDNR and/or Sangamon County. Any and all recommendations to repair/replace erosion control devices shall be completed by the IDNR and/or Sangamon County and/or a recognized agent/subcontractor/consultant within 48 hours of inspection.

In addition:

- All personnel working in the vicinity of FGS habitat shall receive training regarding general information about FGS, mitigation measures, and regulations protecting the FGS.
- The construction zone shall be minimized to disturb the smallest practicable area.
- Barrier fencing shall be installed around the construction site/impact zone(s) to exclude FGS at least one (1) week prior to construction activity. IF any FGS are found within the barrier fence (alive or dead) prior to any construction/ground disturbance activities, Sangamon County, IDNR, and/or its subcontractors shall immediately halt work and contact the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at

217/785-8764 or 217/299-9386 (e-mail: Joe.Kath@illinois.gov) within 24 hours of discovery.

-Barrier fencing shall remain solid and in place until final cleanup and restoration is complete so that no further machinery will impact the area, and no animals, especially the FGS, enter the disturbance zone.

5. Sangamon County, in conjunction with the IDNR, either in cooperation with or through its consultants/subcontractors, shall be responsible for ensuring that all tasks described above in this Incidental Take Authorization package are completed prior to and during construction of the entire project. Any FGS (alive or dead) found at any time within the fenced or non-fenced project area shall be reported to the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at: 217/785-8764 or 217/299-9386 (e-mail: Joe.Kath@illinois.gov) within 24 hours of discovery.

6. The effective period of this authorization may be altered by mutual agreement between the appropriate offices of the Illinois Department of Natural Resources and appropriate offices of Sangamon County, Illinois.

7. Per this Incidental Take Authorization, the following conditions/measures shall apply:

A.. Illinois Department of Natural Resources owns +/- 38 miles of the abandoned Union Pacific Railroad corridor located in Sangamon, Menard and Macoupin counties including the 5.5 mile area to be developed as Phase 1 of the Sangamon Valley Trail.

B. Sangamon County will develop the property as a shared-use trail. Following legislative transfer, Sangamon County will assume ownership, jurisdiction, and maintenance of the IDNR property.

C. The City of Springfield owns the abandoned B&O Railroad corridor which will be utilized and developed as a connection to Stuart Park.

D. The Springfield Park District owns or leases the property at Centennial Park and Stuart Park.

E. Appropriate offices of Sangamon County and the Illinois Department of Natural Resources shall direct their consultants and contractors to:

1. Ensure that all tasks are completed as described in the Conservation Plan and this Incidental Take Authorization Package.

2. Ensure that all maps are accurate and up to date showing areas of Franklin ground squirrel (FGS) habitat that is most suitable.
3. Coordinate training for all construction personnel from a qualified biologist with knowledge of the Franklin's ground squirrel and linear construction projects.
4. Install barrier fencing to restrict the area of construction in those areas most suitable for FGS.
5. Conduct daily inspections during construction of barrier fencing.
6. Conduct daily inspections of the impact area(s) for Franklin's ground squirrels (FGS).
7. Any FGS (alive or dead) found at any time within the fenced or non-fenced project area shall be reported to the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at: 217/785-8764 or 217/299-9386 (e-mail: Joe.Kath@illinois.gov) within 24 hours of discovery.

8. Per this Incidental Take Authorization, the following conditions/measures shall apply - Sangamon County and IDNR coordinated responsibilities include:

- A. Ensure procedures in the Conservation Plan and this Incidental Take Authorization package are implemented in future maintenance of the trail.
- B. Continue to monitor and survey the trail right of way on a periodic basis to ensure mitigation measures have succeeded in protecting FGS habitat.
- C. The trail construction project will be implemented on behalf of Sangamon County, the City of Springfield, the Springfield Park District and the IDNR. Sangamon County will ensure that the conservation plan is implemented, including on-site daily inspections. Additionally, district and IDNR staff will interact with the consultant(s) and provide assistance where necessary.

9. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that either Sangamon County and/or Offices of the IDNR have failed to comply with any of these terms and conditions and/or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of the SVT in Springfield, Sangamon County, Illinois.

10. The IDNR and Sangamon County official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources:

A. For the Office of the Illinois Department of Natural Resources directly involved in construction of the SVT:

Dr. James Herkert, Director
IDNR - Office of Resource Conservation

Signature

Date Signed

Please print name and official title

Date Signed

B. For the Office/Division of Sangamon County, Illinois directly involved in construction of the SVT:

Signature

Please print name and official title

Date