BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

KEYSTONE XL PROJECT
DOCKET HP09-001

PREFILED TESTIMONY OF TOM KIRSCHENMANN
ON BEHALF OF THE COMMISSION STAFF
SEPTEMBER 2009
BEFORE THE PUBLIC UTILITIES COMMISSION STATE OF SOUTH DAKOTA

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Q. State your name.
A. Tom Kirschenmann.

Q. State your employer.
A. State of South Dakota, Department of Game, Fish, and Parks.

Q. State the program for which you work.
A. Division of Wildlife, Terrestrial Resources Chief.

Q. State the program roles and your specific job with the department.
A. The role of the Terrestrial Resources section is to study, evaluate, and manage all wildlife and associated habitats. Management includes game and non-game wildlife populations, habitat management on public lands and technical assistance and habitat development on private lands, population and habitat inventory, and environmental review of local and landscape projects. As Chief of the Terrestrial Resources Section, I oversee all wildlife management and research, as well as habitat management consisting of the department's public lands and private lands programs.

Q. Explain the range of duties you perform.
A. Duties include managing the Terrestrial Resources sections that includes two program administrators, 20 wildlife biologists, and two secretaries; oversee all wildlife research, management, and the establishment of hunting seasons for game species; oversee all private lands habitat programs; coordinate environmental review evaluations and responses related to terrestrial issues; serve as the Department's liaison for several state and federal agencies; and represent the Department on state and national committees.

Q. On whose behalf was this testimony prepared?
A. This testimony was prepared on behalf of the Staff of the South Dakota Public Utilities Commission (Staff).
Q. Are there any sensitive wildlife areas crossed by the pipeline?

A. There are a few areas that would fall under this category: sage brush habitat that includes sage grouse leks, crossing of several rivers, an area where American Burying Beetle are located within Tripp County, and native prairie.

Q. Please briefly summarize each.

A. The northwest corner of South Dakota is the easterly edge of the sagebrush range, including the easterly range of sage grouse. Sage grouse are dependent on sage brush habitat and traditional leks (courtship areas) are extremely important to this species. Disturbance of leks could have a negative impact on reproduction and ultimately recruitment to the population; applying additional strain to already small population. In addition, several species of concern depend on sage habitats in South Dakota, including the sagebrush vole, Brewer’s sparrow and sage thrasher. Although underground directional boring would be used to cross rivers such as the Cheyenne and White Rivers, these riparian areas provide critical habitat for multiple species, including nesting locations for species such as the least tern, bald eagles, and other raptors. Tripp County and the southwest corner of Gregory County has an area approximately 800 square miles in size of occupied American Burying Beetle, with an estimated 600 acres affected by the pipeline route. This species is a federally listed endangered species. The fragmentation of large contiguous tracts of native prairie resulting from infrastructure is a concern and the potential affect it would have on a number of grassland dependent bird species.

Q. Can the applicant mitigate the risks associated with crossing those sensitive areas?

A. Sage brush habitat and sage grouse leks
Locating and monitoring of active leks prior to construction would identify areas that would be recommended to avoid or restrict during March 1 through June 15. Sage brush habitat altered or destroyed during construction should be replanted to native species.

**River crossings and riparian disturbance**

Least Tern: If construction was to occur during the breeding season on the Cheyenne River, it would be recommended to conduct surveys to determine if any active nesting is occurring. If active nests are located, an adequate buffer (minimum of 0.25 mile) should be implemented with no disturbance within that buffer zone.

Bald Eagle: Monitoring of active nests should be conducted prior to and during construction. Active nests located should be provided a buffer of 1 mile during the nesting season (Feb. 1 – Aug. 15).

**American Burying Beetle**

Mitigation efforts should be deferred to the US Fish and Wildlife Service. Potential to set up a mitigation bank to off-set the acres lost to construction.

**Grassland Fragmentation**

It will be difficult to avoid total fragmentation due to roads and other infrastructure development, however disturbed ground should be replanted with native species and all necessary measures taken to avoid the infestation of noxious weeds and invasive plant species.