APPENDIX 3

Candidate Bird Species, Migratory Bird Treaty Act, and Species of Concern listed for Spokane County, WA

Executive Order 13186: Migratory Bird Treaty Act

Executive Order 13186 was signed on January 10, 2001 and is intended to assist federal agencies in their efforts to comply with the Migratory Bird Treaty Act. It does not constitute any legal authorization to take migratory birds. Take, under the Migratory Bird Treaty Act, is defined as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

Executive Order 13186 directs each federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a memorandum of understanding that will promote the conservation of migratory bird populations. Protocols developed under the memorandum of understanding will include the following agency responsibilities:

1) Avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions.
2) Restore and enhance habitat of migratory birds, as practicable.
3) Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

Appendix 3 evaluates project impacts on migratory birds.

Candidate Species

Yellow-billed Cuckoo (*Coccyzus americanus*), Federal and State Status: Candidate species

The Yellow-billed cuckoo is nearly extinct west of the Continental Divide. Major declines among western populations have occurred due to loss and fragmentation of riparian habitat from inundation by reservoirs, flood control activities (channelization), and conversion to agricultural and urban development (Gaines and Laymon 1984) resulting in local extinctions and low colonization rates (Hughes 1999). Urban expansion and livestock grazing and trampling diminish critical understory vegetation, cottonwood/willow recruitment, and local food supplies (Wiggins, D. March 25, 2005). Sites that were occupied by yellow-billed cuckoos generally had higher canopies, denser cover in the upper layers of the canopy, and sparse shrub layers compared to unoccupied sites.

In Idaho, the species is rare and was historically considered a rare and local summer resident (Burleigh 1972, p. 159). In northern and central Idaho, there have only been four records of yellow-billed cuckoo over the last century (Taylor 2000). The yellow-billed cuckoo is considered a rare and erratic visitor and breeder in the Snake River valley in southwestern Idaho. The most recent record for this area comes from the South Fork of the Snake River in 1992 (Stephens and Sturts 1997). The literature does not report an observation of the species as far north as Riggins Idaho for many years.

The yellow-billed cuckoo was formerly a very rare summer visitor to western Washington, especially in the Puget Sound area (Roberson 1980). Jewitt et al. (1953) described the former breeding range in Washington as ranging north to Bellingham, east to Ellensburg, south to Vancouver, and west to Grays Harbor. There are only two published records of yellow-billed cuckoo in eastern Washington. Yellowbilled cuckoos were detected on July 21, 1956, 20 miles north of Grand Coulee Dam in Okanogan County (Weber and Larrison 1977) and in June 1978 at George, Grant County (Roberson 1980).

The January 2014 investigation occurred after the Yellow-billed cuckoo would have migrated out of the Spokane County area if it seasonally utilized the area for breeding or nesting. The investigation for the Yellow-billed cuckoo focused on specific habitat requirements of that species. Cuckoos prefer to nest in areas with at least 10 hectares (ha) (25 acres) of contiguous (riparian) woodland (Laymon 1998). The typical patch size is 20 ha (50 acres) or greater, and the likelihood of occupancy increases dramatically with increasing patch size, but they have been found breeding in patch sizes as small as 4 ha (10 acres) along the Colorado River in southern California (Johnson, Matthew J., 2007). Yellow-billed cuckoo's nest in undisturbed stands of cottonwood/willow galleries greater than 10 acres in total area and greater than 100 meters wide along waterways.

The Action Area does not contain, and is not in close proximity to, adequate habitat patches for that species. The Spokane River corridor located six miles away the Project and Action Areas at its closest point does have habitat patches consisting of species utilized by the yellow-billed cuckoo, but those patches are far smaller than the minimum patch size utilized by this reclusive species. The yellow-billed cuckoo is known not to utilize any habitat with characteristics of those found along the Spokane River close to this project. This project will not impact yellow-billed cuckoo populations or habitat components. There is no suitable habitat for the yellow billed cuckoo in the vicinity of this project.

Designated Critical Habitat

The USFWS has not designated critical habitat for the yellow-billed cuckoo (66 FR 54807 54832).

Analysis of Effects

Direct Effects

Based on the site investigation for yellow-billed cuckoo, it was determined that there is no suitable habitat present and there is no possibility of effects to species or habitats from the project.

Indirect Effects

No indirect effects for yellow-billed cuckoo were identified.

Cumulative Effects

No cumulative effects for yellow-billed cuckoo were identified.

Compliance with Recovery or Management Plans

The yellow-billed cuckoo does not occur in the Action Area and there is no suitable habitat in the immediate vicinity so a recovery plan for yellow-billed cuckoo will not include the subject property.

Conservation Measures

No conservation plans have been created for yellow-billed cuckoo. No conservation or avoidance measures are necessary since the species does not occur near the project.

Determination of Effects

The project will have NO EFFECT on yellow-billed cuckoo or any designated or proposed critical habitat for that species because there is no suitable habitat present and there is no possibility of effects to the species or habitats from the project.

Other Migratory Bird SPECIES OF CONCERN

Bald eagle *(Haliaeetus leucocephalus)* no nesting, perching, foraging **No Effect**

Ferruginous hawk *(Buteo regalis)* nests on rocky ledge or high ground vantage on prairie **No Effect**

Loggerhead shrike *(Lanius ludovicianus)* Observed by BSW on SIA property in 2008.

A robin sized gray, black, and white bird of open areas. Community types not dominated by shrubs, such as grasslands and riparian areas, are not used. Loggerhead Shrikes prefer nesting in big sagebrush and antelope bitterbrush, and avoid spiny hopsage, rabbitbrush, and green rabbitbrush (*Chrysothamnus viscidiflorus*). Nest shrubs are taller, closer to an edge, and contain denser cover and fewer main stems than unoccupied shrubs. Roost shrubs are large, dense live shrubs, whereas tall, dead shrubs that provide good visibility are used for perching. **No Effect because no steppe habitat remains.**

Longeared myotis *(Myotis evotis)* Roosts are sometimes found in crevices in small basalt rock formations. Compared to random plots, roosts are in more open, rocky habitats, closer to edge of forest stands, and relatively distant from sources of permanent water. Often roost in Ponderosa pine trees >30 cm in diameter and >12 m high. Less use of grasslands and closed pine than expected. **No effect if present in vicinity.**

Northern goshawk *(Accipiter gentilis)* goshawks select relatively closed-canopy conifferous/boreal forest habitat for nesting - **No effect**

Olivesided flycatcher *(Contopus cooperi)* found in boreal and western coniferous forests - **No Effect**

Pallid Townsend's bigeared bat (Corynorhinus townsendii pallescens) Eastside mixed conifer forest, shrub-steppe, and riparian-wetlands. In Washington, old buildings, silos, concrete bunkers, barns, caves, and mines are common roost structures. **No effect on roosting or hibernicula**

Peregrine falcon (Falco peregrinus) Two subspecies of peregrine falcons (Falco peregrinus) occur in Washington state at present, (F. p. pealei and F. p. anatum). Peale's peregrine falcon is a coastal subspecies so our concern in Spokane County is with F. p. anatum (Continental peregrine falcon). DDT exposure totally eliminated this subspecies from former breeding sites in eastern Washington. Following a ban on the use of DDT, captive-reared young birds have been released at several sites in Spokane County in an attempt to augment natural reintroductions by

wild birds. There is no potential for degradation or loss of critical habitat for peregrine falcons in the project area. Peregrine falcons nest on cliffs or even man-made structures such as buildings or bridges that do not occur in the project area so no action is required to protect nest sites from human disturbance. The primary method used to reintroduce falcons to the wild is called "hacking". For the protection of hacks and falcons that could be fledged there in the future, the location of the hack sites in Spokane County will not be disclosed in this public document. WDF&W does not currently use any hack sites in the vicinity and does not have plans to in the future. **No effect**

Western Burrowing Owl *(Athene cunicularia)*.
Biological Requirements

Colonies of western burrowing owls are known to occur in scattered locations in the Spokane area, however a district-wide survey has not been completed. In our area, burrowing owls usually migrate between August and September and return to the Spokane area as early as March. The nesting season begins in late March or early April and that is when it would be easiest to locate owls.

Courtship displays include flashing white markings, cooing, bowing, scratching and nipping. The male performs display flights, rising quickly to 100 feet, hovering for 5 to 10 seconds, then dropping 50 feet (Bates, C. 2006). Once the male has paired with a mate, he selectively searches for potential breeding home sites. The male then bring his mate to evaluate potential future home sites and allows her to pick her favorite. Breeding takes place in the owl's chosen ground burrow in early spring. The owl's diet is influenced by its surroundings. Low vegetation in the springtime exposes small rodents, creating an optimal hunting environment for the owls (Zarn, M. 1974). As vegetation grows in the summer, it creates concealing cover for rodents, and the insect population grows. At this time, the owl becomes primarily insectivorous.

Burrowing owls use a variety of natural and modified habitats for nesting and foraging that is typically characterized by low growing vegetation (Grant, R.A. 1965). Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf-courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial (adapted for burrowing or digging) mammals, such as ground squirrels or badgers (Thomsen, L. 1971). They often utilize manmade structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

Burrowing Owl Survey

BSW initiated the survey in accordance with best available science and generally accepted professional practices for the conditions at the time the work was performed as dictated by the timeline for sale of the property. The survey was conducted by walking transect lines with the aid of a compass and GPS unit. The pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines was no more than 30 meters (approximately 100 ft.) and was reduced as necessary to account for differences in terrain, vegetation density, and ground surface visibility.

There are numerous small fossorial mammal burrows on the site. These small burrows are the work of mice, moles, voles, etc and are too small (1-2 inches in diameter) to be utilized by burrowing owls. There are numerous locations where coyotes dug into the small mammal burrows in search of food. The coyote diggings are shallow (2-3 inches deep) and so they are not

suitable for owl habitation, but each excavated area was closely scrutinized to determine if it was an existing owl burrow or if it had characteristics that would make it suitable for classification as a "potential" owl burrow.

BSW investigated the EMFCO Project Area in early October 2008 for a BA on adjacent City property. The 2008 survey was completed about a month after the owls would have left the Spokane area. No "potential" burrows were identified during the 2008 survey that included the Project Area of the EMFCO site. BSW completed a Burrowing owl survey in the EMFCO Action Area on 12-15 January 2014, two months before the species is due to migrate back into the Spokane area. Three "potential" burrows were identified during the 2014 survey.

Two of the "potential" burrows have a 3-4 inch diameter entrance that is suitable for burrowing owl use. The third burrow is a coyote den that showed signs of recent coyote use. That burrow would also be suitable for burrowing owl use if abandoned by coyotes. There were no feathers, owl pellets, whitewash, tracks, bones, or prey evidence that would indicate past owl use at any of the three locations. However, it would be unexpected to find residual evidence of owls at this time of year, several months after a nest or burrow had been vacated.

Two "potential" burrows are located in the right of way of W. McFarlane Road. The third burrow is located near the east property line of the EMFCO site. All three burrows are located approximately 300 feet (or more) outside of the design footprint on the site plan drawing.

Burrowing Owl Mitigation Guidelines (CADF&G Burrowing Owl Consortium)

The objective of mitigation guidelines is to minimize impacts to burrowing owls and owl habitat. Guidelines should be implemented when there is potential for a project to adversely affect burrowing owls. When surveys confirm occupied habitat, mitigation measures are implemented to minimize impacts to owls, burrows, and foraging habitat. The goal is to protect owls, burrows and forage areas from impact rather than displacement of owls to an alternate site. Impacts are defined as follows:

1. Disturbance or harassment within 50 meters (approx. 250 ft.) of occupied burrows.*

*(There are no laws mandating construction buffer widths around documented nests. Recommended construction buffer widths vary among states. WDF&W suggests 1/2 mile, AZ suggests 30m.)

2. Destruction of burrows and burrow entrances. Burrows include structures such as culverts, concrete slabs and debris piles that provide shelter to burrowing owls.

3. Degradation of foraging habitat adjacent to occupied burrows.

Burrowing Owl Impacts

The "potential" owl burrows on the EMFCO site are located approximately 300 feet (or more) outside of the design footprint. No destruction of existing "potential" owl burrows is proposed. The project will result in the destruction of some "potential" foraging habitat, but there are hundreds of contiguous foraging habitat acres in the remaining undeveloped EMFCO site and adjacent SIA property to sustain the species without impact. **The project will have No Effect on Burrowing owls or owl foraging habitat.**

Ground breaking at the site will follow quickly after the sale is closed in February. Ground breaking should begin well before owls return to the Spokane area in late March to mid April 2014 so new burrows will not be established in the Project Area before construction begins. A provision will be placed in the Agreement of Sale that EMFCO is required to conduct a Burrowing owl survey before future expansions.

APPENDIX 4

National Wetland Inventory Map
DNR Water Type Map
NRCS Soil Map