Appendix K: Comparison of Alternatives by Objective and Strategy

Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
	sity of habitat to benefit threatene stem and the Central Tallgrass P		fowl, other migratory birds, and i	ndigenous species in the Lower
1.1 Objective: Wetlands – Manage 3,409 acres of wetland (877.5 acres of semipermanent water and 2,531 acres of seasonally flooded impoundments) which will be manipulated to provide open water, exposed shoreline and mud- flats, and shallow wetlands tradi- tionally preferred by migratory birds and other wetland associated wildlife species. Strategies: Continue to manipulate water levels to maintain existing habitat structure and waterfowl use.	1.1 Objective: Wetlands – Manage 1,227 acres of wetlands and convert 2,181 managed wetlands to wet prairie. Strategies: Same as Alternative A.	1.1 Objective: Wetlands – Same as Alternative A. Strategies: Same as Alternative A.	1.1 Objective: Wetlands – Same as Alternative A except will manage 3,452 acres of wetlands will be managed for the habitats cited. Strategies: Replace water control structures on Eagle and Pelican pools; install water control outlet structures on Snow Goose Pond, Unit C, to enhance water and habitat management; manage water levels for resting and roosting waterfowl; use mechanical or chemical treatment or burning to provide open water, reduce undesirable plants, and encourage preferred seed producing plants; maintain cattail stands; add seasonal tractor operator; construct a bridge across the north end of Davis Creek to provide access to Bluff Pool for water management, monitoring and prescribed burning.	1.1 Objective: Wetlands – Same as Alternative A. Strategies: Same as Alternative D, with less opportunity for public access.

Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
1.2 Objective: Wet Prairie – Conserve and enhance the largest remnant wet prairie in Missouri by preserving and maintaining the integrity of at least 1,077 acres of wet prairie through elimination of non-native species and restoration of associated natural functioning systems (e.g. hydraulic systems, fire, etc.). Strategies: Lower water level during summer to establish moist-soil vegetation; reflood units in the fall.	1.2 Objective: Wet Prairie – Same as Alternative A but at least 3,259 acres of wet prairie managed by 2018. Strategies: Same as Alternative A.	1.2 Objective: Wet Prairie – Same as Alternative A. Strategies: Same as Alternative A.	1.2 Objective: Wet Prairie – Same as Alternative A. Strategies: Conduct species surveys; inventory wet prairie vegetation; reduce exotic invasives through prescribed burning; add a full-time prescribed fire specialist; employ chemical applications to control invasives; restore prairie cordgrass south of Pintail Pool; minimize adverse effects of prescribed burning on Massassauga rattlesnakes and other wetland species by burning smaller units and mowing some areas prior to burning; maintain current disced firebreaks; assess effectiveness of prescribed burning.	1.2 Objective: Wet Prairie – Same as Alternative A. Strategies: Same as Alternative D.

Alternative A: Current Management (No Action) 1.3 Bottomland Mesic Prairie – Manage 291 acres of bottomland mesic prairie to provide quality Alternative A: Restore Historic Mesic Prairie 1.3 Bottomland Mesic Manage 870 acres of mesic prairie to provide quality	Wet and Enha	Alternative C: nce Public Use With Resource Management	Alternative D: Optimize Resource	Alternative E: Intensive Wetland
1.3 Bottomland Mesic Prairie – Manage 291 acres of bottomland mesic prairie to provide quality 1.3 Bottomland Mesic Manage 870 acres of mesic prairie to provide quality	airie Current I	Docourco Managamant		
Manage 291 acres of bottomland mesic prairie to provide quality mesic prairie to provi			Management With Enhanced	Management With Extreme
Manage 291 acres of bottomland mesic prairie to provide quality mesic prairie to provi		Level	Public Use	Measures to Combat
Manage 291 acres of bottomland mesic prairie to provide quality mesic prairie to provi			(Preferred Alternative)	Sedimentation
nesting cover for nongame migratory birds as well as nesting and wintering cover for upland game-bird species, breeding waterfowl, and other associated wildlife species by maintaining, enhancing and restoring grasslands to a mixture of warm and cool season native grasses. Strategies: Continue the use of prescribed fire to combat invasive species; work with volunteers to restore Loess Hill prairies. nesting cover for nongame migratory birds as well as a wintering cover for upland game-bird species, breeding and other associated cies by maintaining, erestoring grasslands of warm and cool season grasses. Strategies: Same as A stra	bottomland de quality game migranesting and pland gameg waterfowl, wildlife spenhancing and to a mixture of a native	Alternative A. S: Same as Alternative A.	Manage 508 acres of bottomland mesic prairie habitat to provide quality nesting cover for nongame migratory birds as well as nesting and wintering cover for upland gamebird species, breeding waterfowl, and other associated wildlife species by maintaining, enhancing and restoring grasslands to a mixture of warm and cool season native grasses. This habitat will be man-	1.3 Bottomland Mesic Prairie – Manage 570 acres of bottomland mesic prairie to provide quality nesting cover for nongame migra- tory birds as well as nesting and wintering cover for upland game- bird species, breeding waterfowl, and other associated wildlife spe- cies by maintaining, enhancing and restoring grasslands to a mixture of warm and cool season native grasses. Strategies: Same as Alternative C.

י מייי גוג אחוווב	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use	Alternative E: Intensive Wetland Management With Extreme Measures to Combat
2				(Preferred Alternative)	Sedimentation
ייין מייין אייי איייין אייייין אייייין איייין	1.4 Loess Hills Prairie – Manage 221 acres of Loess Hill prairie habitat to provide quality nesting cover for nongame migra- tory birds and other associated wildlife species by maintaining, enhancing and restoring grasslands to a mixture of warm and cool sea- son native grasses. This habitat will be managed to maximize native vegetation abundance, minimize fragmentation and maximize the minimum patch size for area-depen- dent species. Strategies: Continue the use of pre- scribed fire to combat invasive spe- cies; work with volunteers to restore Loess Hill prairies.	1.4 Loess Hills Prairie – Same as Alternative A. Strategies: Conduct species surveys and monitoring; use seasonal prescribed burning, continue to restore native warm season grasses and forbs in the Loess Bluff hills, hand-cutting invading tree species and brush; convert 78 acres of agricultural land to native Loess Hill prairie; use seasonal rotational prescribed burning for upland areas; plant native forbs; maximize grassland blocks and minimize fragmentation and edge effect by removing fence/tree rows where appropriate; add a full-time prescribed fire specialist to implement the prescribed fire program.	1.4 Loess Hills Prairie – Same as Alternative A. Strategies: Same as Alternative A.	1.4 Loess Hills Prairie – Manage 299 acres of Loess Hills Prairie for the purposes described under Alternative A. Strategies: Same as Alternative B with addition of full-time fire spe- cialist.	1.4 Loess Hills Prairie – Same as Alternative A. Strategies: Same as Alternative A.
	1.5 Loess Hill Forest – Manage 378 acres of Loess Hills forest for the benefit of associated plant and wildlife species. Strategies: Conduct studies on the effects of browsing.	1.5 Loess Hill Forest – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.	1.5 Loess Hill Forest – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.	1.5 Loess Hill Forest – Same as Alternative A. <u>Strategies:</u> Conduct species surveys; conduct forest inventory; map distribution of Illinois garlic mustard.	1.5 Loess Hill Forest – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.

Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
1.6 Objective: Bottomland Forest – Manage the 1,000 acres of bottomland forest to provide optimum nesting, resting and feeding habitats during breeding and migrational periods for migratory waterfowl and songbirds and to benefit threatened and endangered species other migratory birds, and indigenous species. Strategies: Conduct studies on the effects of browsing.	1.6 Objective: Bottomland Forest – Same as Alternative A. Strategies: Same as Alternative A.	1.6 Objective: Bottomland Forest – Same as Alternative A. Strategies: Same as Alternative A.	1.6 Objective: Bottomland Forest – Same as Alternative A. Strategies: Flood bottomlands within Davis Creek units during spring and fall migration; move wood duck nesting structures to bottomland and upland woodland sites; complete a forest resources inventory; study causes for the loss of bottomland forests understory; map distribution of Illinois garlic mustard; use prescribed burning to reduce invasive species.	1.6 Objective: Bottomland Forest – Same as Alternative A. Strategies: Same as Alternative D.
1.7 Objective: Croplands and Old Fields – Maintain the 579 cropland acres and 59 old field acres existing in 2003. Strategies: Continue agreements with cooperative farmers to leave one-third of crop standing.	1.7 Objective: Croplands – Convert the 501 cropland acres existing in 2003 to bottomland mesic prairie and convert 78 acres of croplands to Loess Bluff prairie and 59 acres of old field to bottom- land mesic prairie. Strategies: Monitor wildlife use of croplands; continue annual coopera- tive farming agreements; imple- ment phased reductions in cropland; continue crop rotation; convert 78 acres of cropland on Munkres tract to Loess Hill prairie by 2006; convert 200 acres of crop- land and 59 acres of old field to bot- tomland mesic prairie by 2015.	1.7 Objective: Croplands – Same as Alternative A Strategies: Same as Alternative A.	1.7 Objective: Croplands – Implement a long range plan to convert 279 acres of the 579 cropland acres and 59 acres of existing old field to mesic bottomland prairie and Loess Hill prairie. The reduction will be accomplished by 2015 through attrition of current cooperators. Strategies: Same as Alternative B.	1.7 Objective: Croplands – Reduce the cropland acreage to 300 acres, with resulting increases in bottomland mesic prairie. Strategies: Same as Alternative A.

Igar Crook NWR Com	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
nachen sine Consegnation Plan	1.8 Objective: Exotic, Invasive and Nuisance Species – Control and reduce the presence of exotic, invasive and nuisance species of plants and animals on the Refuge. Non-native species will not exceed 2003 density or distribution levels. Strategy: Continue existing burn plan.	1.8 Objective: Exotic, Invasive and Nuisance Species – Same as Alternative A. Strategies: Use GIS technology to assess problem of invasive exotic species; use appropriate integrated species management techniques; work with volunteers in manual control efforts of Illinois garlic mustard; continue active monitoring to detect invasive species; use short-term farming to deter invasive species; continue monitoring gypsy moths.	1.8 Objective: Exotic, Invasive and Nuisance Species – Same as Alternative A. Strategies: Same as Alternative A.	1.8 Objective: Exotic, Invasive and Nuisance Species – Same as Alternative A. Strategies: Same as Alternative B.	1.8 Objective: Exotic, Invasive and Nuisance Species – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.
	1.9 Land Acquisition – Working with willing sellers, acquire up to 400 acres in fee title of existing and restorable wetlands within the authorized Refuge boundaries. Strategies: Initate action to identify willing sellers and to proceed with getting the acquisition proposal included in the Land Acquisition Priority System; prioritize acquisi- tion of wetland and prairie habitat types.	1.9 Land Acquisition – Same as Alternative A. Strategies: Same as Alternative A.	1.9 Land Acquisition – Same as Alternative A. Strategy: Same as Alternative A.	1.9 Land Acquisition – Same as Alternative A. Strategy: Same as Alternative A.	1.9 Land Acquisition – Same as Alternative A. Strategies: Same as Alternative A.

Alternative A:	Alternative B:	Alternative C:	Alternative D:	Alternative E:
Current Management	Restore Historic Wet and	Enhance Public Use With	Optimize Resource	Intensive Wetland
(No Action)	Mesic Prairie	Current Resource Management	Management With Enhanced	Management With Extreme
(No Florion)	Wiesie France	Level	Public Use	Measures to Combat
		Level		
			(Preferred Alternative)	Sedimentation
1.10 Objective: Watershed Improve-	1.10 Objective: Watershed Improve-	1.10 Objective: Watershed Improve-	1.10 Objective: Watershed Improve-	1.10 Objective: Watershed Improve-
ment –	ment –	ment –	ment –	ment –
Reduce sedimentation from soil	Same as Alternative A.			
erosion and improve water quality	Strategies: Same as Alternative A.			
on Squaw Creek NWR from private				
lands in the 60,000-acre upstream				
watershed using conservation prac-				
tices fostering improved soil and				
water uses. By 2010, approximately				
100 percent of the goals established				
in the AgNPS project in Squaw				
Creek will be accomplished, includ-				
ing erosion practices, water quality,				
riparian conservation and nutrient				
management.				
Strategies: Continue work with				
Partners for Fish and Wildlife, the				
Holt County Soil and Water Con-				
servation District, and the Natural				
Resources and Conservation Ser-				
vice to improve water quality and				
reduce peak flows entering Squaw				
Creek; continue to provide financial incentives to private landowners				
through the cited partners to imple-				
ment conservation measures within				
the Squaw Creek and Davis Creek				
watershed; monitor water quality;				
look for opportunities to purchase				
land from willing sellers within				
authorized boundaries.				
addicined boundaries.				

Zam Canal: MIIID Cana	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
ומ יי	1.11 Objective: Wildlife Management District – Develop, improve and maintain native riparian, wetland, and grassland habitats consistent with the existing dominant vegetative structure (non-agricultural crop) contributions to soil and water conservation within the Management District and also benefitting a broad spectrum of both game and non-game migratory birds and other resident wildlife species. Strategies: Continue current surveys and monitoring.	1.11 Objective: Wildlife Management District – Same as Alternative A. Strategies: Same as Alternative A.	1.11 Objective: Wildlife Management District – Same as Alternative A. Strategies: Same as Alternative A.	1.11 Objective: Wildlife Management District – Same as Alternative A. Strategies: Actively manage established native grasslands using prescribed fire and chemical treatments for invasive species; work with easement owners to convert former croplands; develop or restore riparian and wetland sites on easement properties; monitor grassland to formulate an annual strategy; fence riparian areas to prevent damage from cattle; survey easement and fee title lands to delineate boundaries; document easement violations; take an active role in the private lands program when possible.	1.11 Objective: Wildlife Management District – Same as Alternative A. Strategies: Same as Alternative A.

	Alternative B: Restore Historic Wet and Mesic Prairie ndigenous to the Refuge, the Lower life Resource Conservation Priorities.	Alternative C: Enhance Public Use With Current Resource Management Level Missouri River Ecosystem, and the C	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative) entral Tallgrass Prairie Ecosystem w	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation Ith emphasis on those species iden-
2.1 Objective: Regional Shorebird Designation – Designation of Squaw Creek NWR as a regional shorebird site of the Wester Hemispheric Shorebird Reserve Network (WHSRN) by 2005. Strategies: Strategies: Conduct fall and spring migration surveys to document shorebird use; complete a nomina- tion form; document Wood Duck and Eastern Bluebird houses.	2.1 Objective: Regional Shorebird Designation – Same as Alternative A. Strategies: Same as Alternative A.	2.1 Objective: Regional Shorebird Designation – Same as Alternative A. Strategies: Same as Alternative A.	2.1 Objective: Regional Shorebird Designation – Same as Alternative A. Strategies: Same as Alternative A.	2.1 Objective: Regional Shorebird Designation – Same as Alternative A. Strategies: Same as Alternative A.
2.2 Objective: Population Counts – Obtain annual peak population counts and use-days for Bald Eagles, Snow Geese, and other waterfowl and other indicator species using procedures outlined in the Wildlife Inventory Plan. Strategies: Continue current population counts, including Bald Eagles, waterfowl, shorebirds, marsh birds, and deer counts.	2.2 Objective: Population Counts – Same as Alternative A. Strategies: Same as Alternative A.	2.2 Objective: Population Counts – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.	2.2 Objective: Population Counts – Same as Alternative A. Strategies: Use most efficient technology available; maintain a high level of disease monitoring during spring and fall migration; monitor encroachment by non-native species; document use of different habitats by indicator species; monitor marsh and water bird nesting; continue inventory of plant and wildlife species to determine long-term monitoring needs.	2.2 Objective: Population Counts – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.

levels of a minimum of 5 million by providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow levels of a minimum of 5 million by providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow levels of a minimum of 5 million by approximately 60 percent to approximately 5 percent to approximately 5.3 million use days in response to a comparable decrease in wetland acres and a corresponding increase in wet prairie.	ã		т			
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	ω C ₂					
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	ree	Current Management	Restore Historic Wet and	Enhance Public Use With	Optimize Resource	Intensive Wetland
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	$k \lambda$	(No Action)	Mesic Prairie	Current Resource Management	Management With Enhanced	Management With Extreme
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	Ŋ	(110 7 101.0.1)			•	9
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	R			Level		
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	noč				(Preferred Alternative)	Sedimentation
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	pr	2.3 Objective: Waterfowl Use Days	2.3 Objective: Waterfowl Use Days	2.3 Objective: Waterfowl Use Days	2.3 Objective: Waterfowl Use Days	2.3 Objective: Waterfowl Use Days
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average in wetland acres and a corresponding increase in wetland acres and a corresponding decrease in wetland acres and in wetland acres and in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in we	ehe	_	_	_	_	_
providing adequate habitat as discussed under the Habitat Goal and based on a 5-year running average of waterfowl data, excluding Snow Geese. Strategies: Monitor arrivals and concentration build-ups in accordance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor waterfowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables approximately 2 million use days, in response to a comparable increase in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres and corresponding decrease in wetland acres and a corresponding decrease in wetland acres acres in wetland acres acres in wetland acres acrea	nsi	Maintain annual waterfowl use day	Waterfowl use days will decrease by	Same as Alternative A.	Same as Alternative A.	Waterfowl use days will increase by
dance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables			approximately 60 percent to	Strategies: Same as Alternative A.	Strategies: Same as Alternative A.	approximately 5 percent to approxi-
dance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables	C_{00}	providing adequate habitat as dis-	approximately 2 million use days, in			mately 5.3 million use days in
dance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables	ise	cussed under the Habitat Goal and	response to a comparable decrease			response to a comparable increase
dance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables	rec	based on a 5-year running average	in wetland acres and a correspond-			in wetland acres and correspond-
dance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables	tic	of waterfowl data, excluding Snow	ing increase in wet prairie.			ing decrease in other habitats.
dance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables	m_{I}		Strategies: Same as Alternative A.			Strategies: Same as Alternative A.
dance with the Wildlife Inventory Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables	ola	Strategies: Monitor arrivals and				
Plan; monitor waterfowl activity during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables	n	concentration build-ups in accor-				
during migration; monitor water- fowl concentration during migra- tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables						
fowl concentration during migration; for indication of disease or stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables						
tion; for indication of disease or stres; when waterfowl concentra- tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables		0 0 ,				
stres; when waterfowl concentration exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables						
tion exceeds objective levels to the extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables		,				
extent that the welfare of waterfowl is at risk, implement distrubance measures; record population data in a consistent format that enables		· /				
is at risk, implement distrubance measures; record population data in a consistent format that enables						
measures; record population data in a consistent format that enables						
a consistent format that enables						
comparison of population.						
		comparison of population.				

Alternative A:	Alternative B:	Alternative C:	Alternative D:	Alternative E:
Current Management	Restore Historic Wet and	Enhance Public Use With	Optimize Resource	Intensive Wetland
(No Action)	Mesic Prairie	Current Resource Management	Management With Enhanced	Management With Extreme
		Level	Public Use	Measures to Combat
			(Preferred Alternative)	Sedimentation
2.4 Objective: Reduction of Snow Geese – Actively assist international efforts to reduce the mid-continent population of Snow Geese by at least 5 percent each year until the Arctic Goose Working Group reduction goal has been achieved. Strategies: Actively discourage Snow Geese from using Refuge croplands; continue to provide open water for roosting in an area that provides hunting opportunities off-Refuge; increase the effort to obtain Snow Geese neck collar readings during spring and fall migrations.	2.4 Objective: Reduction of Snow Geese – Same as Alternative A. Strategies: Same as Alternative A.	2.4 Objective: Reduction of Snow Geese – Same as Alternative A. Strategies: Same as Alternative A.	2.4 Objective: Reduction of Snow Geese – Same as Alternative A, with addition of initiating a spring Snow Goose hunt within 1 year of completion of the CCP. Strategies: Offer spring Snow Goose hunt within 1 year of plan completion; reduce cropland from 579 acres to 300 acres by 2015; actively discourage Snow Geese from using Refuge croplands; continue to maintain open water in Eagle and Pelican pools; increase the effort to obtain Snow Geese neck collar readings during spring and fall migrations.	2.4 Objective: Reduction of Snow Geese – Same as Alternative A. Strategies: Same as Alternative A.
2.5 Objective: White-tailed Deer Management – Manage the size of the white-tailed deer herd on the Refuge through controlled hunts to reduce the Refuge white-tailed deer herd to a fall relative density of 20 to 25 deer per square mile. Strategies: Monitor herd size and health; monitor habitat for damage; continue deer hunts; initiate a research project to determine the effects of browse damage.	2.5 Objective: White-tailed Deer Management – Same as Alternative A. Strategies: Same as Alternative A.	2.5 Objective: White-tailed Deer Management – Same as Alternative A. Strategies: Same as Alternative A.	2.5 Objective: White-tailed Deer Management – Same as Alternative A. Strategies: Same as Alternative A.	2.5 Objective: White-tailed Deer Management – <u>Strategies:</u> Same as Alternative A.

aw Creek NWR Con	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
taw Creek NWR Comprehensive Conservation Plan	2.6 Objective: Bald Eagle – Maintain the bottomland cotton- wood forest areas and isolated mature cottonwood stands that pro- vide roosting and nesting sites and that exist in 2005 and continue to provide habitat that maximizes Bald Eagle use days during fall and winter migration periods. Strategies: Manage riparian cotton- wood forests to ensure sustained stands of mature roost and nest trees; develop designated regenera- tion sites that will favor seedling development; manage public access to assure adequate habitat is pro- vided.	2.6 Objective: Bald Eagle – Same as Alternative A. Strategies: Same as Alternative A.	2.6 Objective: Bald Eagle – Same as Alternative A. Strategies: Same as Alternative A.	2.6 Objective: Bald Eagle – Same as Alternative A. Strategies: Same as Alternative A.	2.6 Objective: Bald Eagle – Same as Alternative A. Strategies: Same as Alternative A.
	2.7 Objective: Eastern Massasauga Rattlesnake – Maintain existing wet prairie habitat of 1,077 acres existing in 2003 to maintain the habitat used by eastern Massassauga rattlesnakes on Squaw Creek NWR (see Object 1.2 regarding habitat acreage). The population numbers and habitat use will be monitored to assess the response to the habitat manipulation. Strategies: Continue to participate in research efforts; continue to monitor local population status; participate in cooperative studies.	2.7 Objective: Eastern Massasauga Rattesnake – Increase wet prairie habitat from 1,077 acres existing in 2003 to 3,259 acres by 2018 will enhance the habitat used by the eastern Massassauga rattlesnake on the Refuge (see objective 1.2 regarding habitat). The population numbers and habitat use will be monitored to assess the response to habitat manipulation. Strategies: Same as Alternative A.	2.7 Objective: Eastern Massasauga Rattlesnake – Same as Alternative A. <u>Strategy:</u> Same as Alternative A.	2.7 Objective: Eastern Massasauga Rattlesnake – Maintain existing wet prairie habi- tat of 1,077 acres and increase bot- tomland mesic prairie by 217 acres for a total of 508 acres. Strategies: Same as Alternative A.	2.7 Objective: Eastern Massasauga Rattlesnake – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.

Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
2.8 Objective: Least Bittern – By providing hemimarsh cattail habitat suitable for nesting, the Refuge will benefit the Least Bit- tern, which is ranked as an "imper- iled" species by the State of Missouri. The population distribu- tion and numbers will be monitored through surveys and research. Strategies: Maintain the presence of cattail stands; continue to moni- tor nesting activity.	2.8 Objective: Least Bittern – Same as Alternative A but approximately 349 acres of hemi-marsh cattail habitat will be provided. Strategies: Same as Alternative A.	2.8 Objective: Least Bittern – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.	2.8 Objective: Least Bittern – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.	2.8 Objective: Least Bittern – Same as Alternative A. Strategies: Same as Alternative A.
2.9 Objective: Passerine Species – The Refuge will support and follow the recommendations listed in Region 3's Resource Conservation Priorities for the rare and declining passerine species identified in Appendix I. Management interest will focus upon species for which Squaw Creek NWR is or was within their primary range. Strategies: Collect data from rou- tine monitoring; conserve and restore critical habitat; support partners' conservation efforts; encourage and support education efforts.	2.9 Objective: Passerine Species – Same as Alternative A. Strategies: Same as Alternative A.	2.9 Objective: Passerine Species – Same as Alternative A. Strategies: Same as Alternative A.	2.9 Objective: Passerine Species – Same as Alternative A. Strategies: Same as Alternative A.	2.9 Objective: Passerine Species – Same as Alternative A. Strategies: Same as Alternative A.

C THEFT C	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
	2.10 Objective: State Species of Concern – State of Missouri species of concern, such as long-tailed weasels and Franklin's ground squirrels, will be reported to Missouri Department of Conservation staff when observed on or near the Refuge. Strategies: Report observations of state-listed species, including date and location, to the Department of Conservation.	2.10 Objective: State Species of Concern – Same as Alternative A. Strategies: Same as Alternative A.	2.10 Objective: State Species of Concern – Same as Alternative A. Strategies: Same as Alternative A.	2.10 Objective: State Species of Concern – Same as Alternative A. Strategies: Same as Alternative A.	2.10 Objective: State Species of Concern – Same as Alternative A. <u>Strategies:</u> Same as Alternative A.

		Alternative C: Enhance Public Use With Current Resource Management Level preciate the natural resources and e	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative) ecological processes and cultural res	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation Sources of Squaw Creek NWR, will
3.1 Objective: Interpretation – Design, fund and implement interpretive programs and facilities that meet Service standards and that will attract and accommodate up to 130,000 visitors annually. Strategies: Continue to offer interpretive programs, tours and demonstrations as time and staffing allow.	Refuge, and will support the Service 3.1 Objective: Interpretation – Same as Alternative A. Strategies: Same as Alternative A.	3.1 Objective: Interpretation – Design, fund and implement interpretive programs and facilities that meet Service standards and that will attract and accommodate up to 175,000 visitors annually by 2013 with a subsequent annual increase of 2 percent throughout the life of this plan. Strategies: Develop clear Refuge themes related to key resource issues; replace the auto tour leaflet with signs and sound posts; develop interpretive aids for Callow Memorial Trail; explore potential for extending Loess Bluff Trail; prepare new interpretive leaflets for species groups and Refuge resources and history; update existing leaflets; initiate contract for concept plan for a visitor center; remove picnic tables and grill from headquarters and replace with amphitheater; update the orientation video.	3.1 Objective: Interpretation – Same as Alternative A. Strategies: Same as Alternative C.	3.1 Objective: Interpretation – Same as Alternative A. Strategies: Same as Alternative A.

an Creek NWP Com	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
manhamaina Manamantian Dlam	3.2 Objective: Environmental Education – Offer environmental education programs, materials and facilities that meet Service standards and accommodate visitation consistent with 2004 environmental education levels. Strategies: Continue to offer interpretive programs, tours and demonstrations at current level.	3.2 Objective: Environmental Education – Same as Alternative A. Strategies: Same as Alternative A.	3.2 Objective: Environmental Education – Offer environmental education programs, materials and facilities that meet Service standards and accommodate up to 6,000 students annually by 2013. Evaluate the effectiveness of the environmental education program by 2013. Strategies: Alert schools to Refuge resources; conduct an annual teacher workshop; develop accessible EE activities linked to local and state education standards; expand the outdoor classroom facilities by adding a boardwalk with a learning station into a marsh area; add a seasonal clerk to staff the visitor contact station during peak public use periods; recruit and train volunteers to conduct activities.	3.2 Objective: Environmental Education – (Same as Alternative C) Strategies: Same as Alternative C.	3.2 Objective: Environmental Education – Same as Alternative A. Strategies: Same as Alternative A.

Alternative A:	Alternative B:	Alternative C:	Alternative D:	Alternative E:
Current Management	Restore Historic Wet and	Enhance Public Use With	Optimize Resource	Intensive Wetland
(No Action)	Mesic Prairie	Current Resource Management	Management With Enhanced	Management With Extreme
,		Level	Public Use	Measures to Combat
		Lovoi	(Preferred Alternative)	Sedimentation
			(Freieneu Aitemative)	Sedimentation
3.3 Objective: Wildlife Observation	3.3 Objective: Wildlife Observation	3.3 Objective: Wildlife Observation	3.3 Objective: Wildlife Observation	3.3 Objective: Wildlife Observation
and Photography –	and Photography –	and Photography –	and Photography –	and Photography –
Maintain, improve and develop to	Same as Alternative A.	Maintain, improve and develop to	Same as Alternative C.	Same as Alternative A.
Service standards facilities and pro-	Strategies: Same as Alternative A.	Service standards facilities and pro-	Strategies: Same as Alternative C.	Strategies: Same as Alternative A.
grams to encourage more interac-		grams to encourage more interac-		
tive visitor participation resulting		tive visitor participation resulting		
in a higher quality outdoor experi-		in a higher quality outdoor experi-		
ence, including an existing 10-mile		ence, including an existing 10-mile		
circular auto tour route, the 2-mile Mallard Marsh Road and three		circular auto tour route, the 2-mile Mallard Marsh road and the three		
walking trails.		walking trails and, by 2013, an		
Strategies: Continue to participate		extension of the Callow Memorial		
in Eagle Days; maintain auto tour		Trail to form a looped trail with the		
route.		Loess Bluff Trail and a one-quar-		
Touce.		ter-mile boardwalk to a marsh.		
		Strategies: Improve facilities,		
		including upgrading the surface of		
		the auto tour route and improving		
		walking trail surfaces; develop one		
		or more accessible wildlife observa-		
		tion blinds for photographers and		
		the general public; construct an		
		accessible boardwalk into a marsh;		
		maintain walking tours free of		
		debris; create a two-way road		
		between the start of the auto tour		
		route and the Eagle Pool hiking		
		trail; create pull-off areas on the		
		auto tour route; post maps on		
		kiosks.		

an	Alternative A:	Alternative B:	Alternative C:	Alternative D:	Alternative E:
ريمور	Current Management	Restore Historic Wet and	Enhance Public Use With	Optimize Resource	Intensive Wetland
<i>k</i> ≥	(No Action)	Mesic Prairie	Current Resource Management	Management With Enhanced	Management With Extreme
ZV.	(Level	Public Use	Measures to Combat
3			20.00	(Preferred Alternative)	Sedimentation
nnn	3.4 Objective: Hunting and Fishing	3.4 Objective: Hunting and Fishing	3.4 Objective: Hunting and Fishing	3.4 Objective: Hunting and Fishing	3.4 Objective: Hunting and Fishing
oho	-	-	-	-	-
nsin	Provide quality recreational hunt-	Same as Alternative A.	Same as Alternative A, with the	Same as Alternative C.	Same as Alternative A.
Ď.	ing opportunities for up to 135 deer hunters per season to help maintain	Strategies: Same as Alternative A.	addition of the spring goose hunt. Strategies: Continue monitoring	Strategies: Same as Alternative C.	Strategies: Same as Alternative A.
18th	healthy populations. Continue to		the deer hunt; manage deer hunt to		
Ditrit	allow bank fishing at legal public		avoid conflicts with other uses and		
tion	access points throughout the Refuge.		resources. Continue working with MDOC regarding deer hunt regula-		
Pl	Strategies: Continue muzzle-load-		tions. Continue to permit fishing at		
33.	ing-only antlerless deer hunt; con-		legal public access points. A man-		
	tinue to allow fishing of limited fishery resource.		aged spring Snow Goose hunt will be offered. Inform public when		
	fishery resource.		snagging of rough fish is permitted.		
			Provide at least one accessible deer		
			hunting blind with signage and		
			parking space and develop reserva- tion system.		
	3.5 Objective: Mushroom Gathering	3.5 Objective: Mushroom Gathering	3.5 Objective: Mushroom Gathering	3.5 Objective: Mushroom Gathering	3.5 Objective: Mushroom Gathering
	-	_	-	_	-
	Allow opportunities for mushroom	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
	gathering in selected areas. Strategies: Allow morel mushroom	Strategies: Same as Alternative A.	Strategies: Same as Alternative A.	Strategies: Same as Alternative A.	Strategies: Same as Alternative A.
	gathering in the Loess Bluffs by				
	special permit; patrol areas closed				
	to mushroom picking during gathering season.				
	ering beason.				

Appendix K: Comparison of Alternatives by Objective and Strategy 217

Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
3.6 Objective: Public Information – Refuge programs will continue to serve the traditional Refuge users as of 2004. Strategies: Continue existing use of news releases to advertise events like Eagle Days and hunting program.	3.6 Objective: Public Information – Same as Alternative A. Strategies: Same as Alternative A.	3.6 Objective: Public Information – By 2025, 60 percent of people within 100 miles of the Refuge will be aware of the Refuge, its mission, its facilities and scheduled events. Emphasize reaching diverse groups of people who are not part of the traditional Refuge audience. Strategies: Expand means of publicizing Refuge events to include electronic technologies and the Internet; ask visitors how they heard about events; provide a 24-hour telephone line with Refuge information; create and maintain an accessible website; maintain and update Refuge information at the I-29 rest stop; maintain current media list and distribute 35 news releases annually; continue coordination with St. Joseph Visitors and Convention Bureau; reinstate a public service slide show; explore use of highway billboards; develop informational brochures; participate in youth-oriented activities; work with Regional Office external affairs.	3.6 Objective: Public Information – Same as Alternative C. Strategies: Same as Alternative C.	3.6 Objective: Public Information – Same as Alternative A. Strategies: Same as Alternative A.

vaw Creek NWR Comprehensive	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
prehensive Conservation Plan	3.7 Objective: Volunteers – Maintain volunteer program at 2004 level. Strategies: Continue to recruit vol- unteers for help with hand cutting invasive species and greeting visi- tors during Eagle Days at 2003 level.	3.7 Objective: Volunteers – 20 percent decrease in volunteer hours. Strategies:	3.7 Objective: Volunteers – Increase the number of volunteer hours to 7,500 by 2013, with a 5 per- cent annual increase, to serve both in the Visitor Contact Station and around the Refuge as interpretive and educational guides and in supervised habitat management projects. Strategies: Increase volunteer recruitment efforts through web sites, news releases, public service ads, and work with civic groups; be actively involved in local Audubon chapters; provide temporary hous- ing for volunteers when it's avail- able.	3.7 Objective: Volunteers – Same as Alternative C. Strategies: Same as Alternative C.	3.7 Objective: Volunteers – Same as Alternative A. Strategies: Same as Alternative A.
	3.8 Objective: Friends of Squaw Creek NWR – Maintain and enhance a close work- ing relationship with Friends of Squaw Creek NWR that helps fos- ter common goals supporting the Refuge mission. Strategies: Continue to support Friends of Squaw Creek NWR and be actively involved by attending board meetings and providing advice and assistance.	3.8 Objective: Friends of Squaw Creek NWR – Same as Alternative A. Strategies: Same as Alternative A.	3.8 Objective: Friends of Squaw Creek NWR – Same as Alternative A. Strategies: Same as Alternative A.	3.8 Objective: Friends of Squaw Creek NWR – Same as Alternative A. Strategies: Same as Alternative A.	3.8 Objective: Friends of Squaw Creek NWR – Same as Alternative A. Strategies: Same as Alternative A.

Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
3.9 Objective: Government Agencies & Non-government Organizations – The 2004 level of involvement with NGOs and government agencies (see Chapter 5, Partnerships) will be maintained. Strategies: Continue existing work with Natural Resources Conservation Service, Holt County Soil and Water Conservation District, and the U.S. Geological Survey to reduce sedimentation in the Refuge's watershed.	3.9 Objective: Government Agencies & Non-government Organizations – Same as Alternative A. Strategies: Same as Alternative A.	3.9 Objective: Government Agencies & Non-government Organizations – To increase awareness of and support for the Refuge, increase level of active cooperation with non-governmental organizations and governmental agencies on different aspects of on-Refuge and off-Refuge management and educational efforts, both in terms of the number of NGOs and the level of effort. The 2004 level of involvement with NGOs will be maintained, but additional efforts will be made to share Refuge information with these agencies and organizations during routine interactions with them. Strategies: Continue work with traditional NGOs; continue to work with local Audubon societies; increase activity with the St. Joseph Visitor and Convention Bureau in promoting the Refuge and its activities; increase work with the Mound City Chamber of Commerce and local groups; actively look for partnering opportunities with other regional conservation groups, service organizations and educational institutions.	3.9 Objective: Government Agencies & Non-government Organizations – Same as Alternative C. Strategies: Same as Alternative C.	3.9 Objective: Government Agencies & Non-government Organizations – Same as Alternative A. Strategies: Same as Alternative A.

aw Creek NWR Con	Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
novehensine Conservation Plan	3.10 Objective: Research Support – Actively encourage and provide technical assistance and logistical support to qualified researchers to support ongoing cooperative investigations of long-term management importance to the Refuge or that supports other compatible projects. Strategies: Cooperate with the U.S. Geological Survey on a project studying stream flow and sedimentation; solicit assistance from additional partners; continue work with Missouri Western State College staff; continue research on the Eastern Massassauga rattlesnake; promote potential research opportunities in other forums and media; provide temporary housing to researchers when it is available.	3.10 Objective: Research Support – Same as Alternative A. Strategies: Same as Alternative A.	3.10 Objective: Research Support – Same as Alternative A. Strategies: Same as Alternative A.	3.10 Objective: Research Support – Same as Alternative A. Strategies: Same as Alternative A.	3.10 Objective: Research Support – Same as Alternative A. Strategies: Same as Alternative A.
	3.11 Objective: Cultural Resources - Evaluate and preserve archaeologic and historic resources. Strategies: contract a survey to identify Native American sites; determine the status of farmstead buildings on Munkres tract.	3.11 Objective: Cultural Resources - Same as Alternative A. Strategies: Same as Alternative A.	3.11 Objective: Cultural Resources - Same as Alternative A. Strategies: Same as Alternative A.	3.11 Objective: Cultural Resources - Same as Alternative A. Strategies: Same as Alternative A.	3.11 Objective: Cultural Resources - Same as Alternative A. Strategies: Same as Alternative A.

Alternative A: Current Management (No Action)	Alternative B: Restore Historic Wet and Mesic Prairie	Alternative C: Enhance Public Use With Current Resource Management Level	Alternative D: Optimize Resource Management With Enhanced Public Use (Preferred Alternative)	Alternative E: Intensive Wetland Management With Extreme Measures to Combat Sedimentation
3.12 Objective: Health and Safety – Ensure the health and safety of visitors, volunteers, and employees and protect the natural resources and physical property of the Refuge. Strive for zero accidents for visitors and no accidents resulting in loss of work for employees. Strategies: Work with zone officers and state conservation agents to provide adequate law enforcement presence; add a new electric gate at the Refuge entrance; complete a boundary survey on Munkre's tract; provide routine maintenance and an annual inspection of all Refuge facilities; replace or close facilities that compromise public safety; review permit, licenses and inspections annually; revise the station safety plan; conduct regular safety meetings; refresh staff in CPR and first aid techniques every 2 years.	3.12 Objective: Health and Safety – Same as Alternative A. Strategies: Same as Alternative A.	3.12 Objective: Health and Safety – Same as Alternative A. Strategies: Same as Alternative A.	3.12 Objective: Health and Safety – Same as Alternative A. Strategies: Same as Alternative A.	3.12 Objective: Health and Safety – Same as Alternative A. Strategies: Same as Alternative A.

3			· · · · · · · · · · · · · · · · · · ·		 1
	Alternative A:	Alternative B:	Alternative C:	Alternative D:	Alternative E:
000	Current Management	Restore Historic Wet and	Enhance Public Use With	Optimize Resource	Intensive Wetland
7	(No Action)	Mesic Prairie	Current Resource Management	Management With Enhanced	Management With Extreme
7	(110 / 1011011)		Level	Public Use	Measures to Combat
7			Level		
3				(Preferred Alternative)	Sedimentation
3	3.13 Objective: Welcome and Ori-	3.13 Objective: Welcome and Ori-	3.13 Objective: Welcome and Ori-	3.13 Objective: Welcome and Ori-	3.13 Objective: Welcome and Ori-
ho	ent Visitors –	ent Visitors –	ent Visitors –	ent Visitors –	ent Visitors –
3 3.	Provide visitors with welcoming,	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
010	comfortable experience through	Strategies: Same as Alternative A.	Strategies: Same as Alternative A.	Strategies: Same as Alternative A.	Strategies: Same as Alternative A.
3	adequate guidance that does not				
5	detract from appreciating nature.				
200	Strategies: Enhance brochures and				
†	kiosks to include information rele-				
20 1	vant to a Refuge visit; revise and				
71	implement the station sign plan;				
5	indicate restrooms on Refuge loca-				
	tion maps; install information and				
	wayfinding signs per FWS Sign				
	Handbook; enhance information				
	provided in wayfinding signs;				
	include information on sites and				
	when and where sites can viewed on				
	kiosks and maps; upgrade all orientation to be accessible to visitors				
	with visual disabilities; identify and				
	remove items that detract from nat-				
	uralness; build pedestrian spaces at				
	start of and along auto tour route;				
	expand information provided along				
	auto tour route; develop an accessi-				
	ble web site for the Refuge.				
	and the state of t				