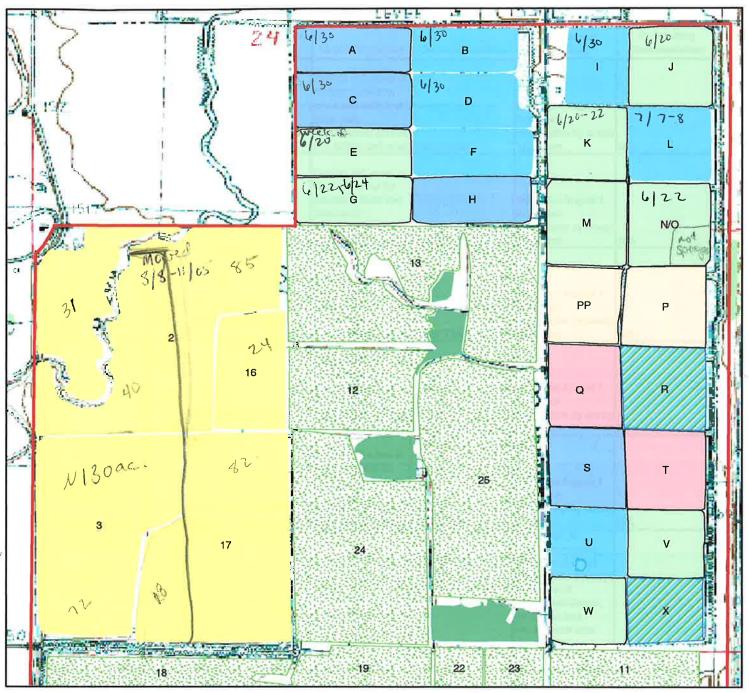
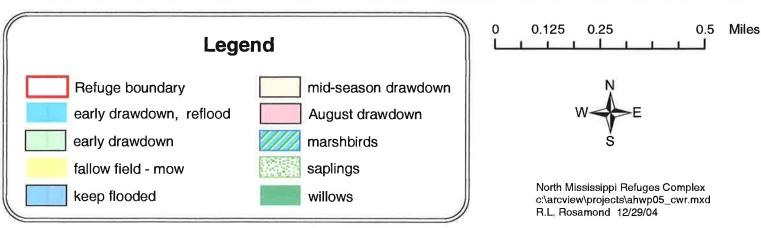
# Annual Habitat Work Plan 2005 Coldwater River National Wildlife Refuge





Management Unit	Acres	Conservation Target(s (Habitat/Wildlife)	Habitat Objectiv	e Current Conditio	Management n Prescription	Supporting Documentation
Field 1	31	Fallow Fields/ Grassland Birds	Provide 295 acres of old field habitat for grassland birds and other early successional special (i.e. rabbits and quarters)	es	Mow after August 1 to prevent colonization by wood vegetation	/ N/A
Field 2		Fallow Fields/ Grassland Birds	Provide 295 acres of old field habitat for grassland birds and other early successional specie (i.e. rabbits and qua	s	Mow after August 1 to prevent colonization by woody vegetation	, N/A
Field 3		Fallow Fields/ Grassland Birds	Provide 295 acres o old field habitat for grassland birds and other early successional specie (i.e. rabbits and quai	s	Mow after August 1 to prevent colonization by woody vegetation	N/A
Field 16		Fallow Fields/ Grassland Birds	Provide 295 acres of old field habitat for grassland birds and other early successional species (i.e. rabbits and quail		Mow after August 1 to prevent colonization by woody vegetation	N/A
Field 17	F 82 E	Fallow Fields/ Grassland	Provide 295 acres of old field habitat for grassland birds and other early successional species (i.e. rabbits and quail	Fallow Field	Mow after August 1 to prevent colonization by woody vegetation	N/A
catfish Ponds	420 S		Specific objectives selow	See below	See below. In general spot spray willows as needed with Rodeo. If heavy infestation of coffeeweed occurs, try to flood and overtop soon after germination.  Otherwise, try to cut (high blade) prior to	
ond A		F	Provide 190 acres of noist-soil habitat for ver-wintering	Levees cut down and reworked in Fall 2004, new pipes installed. Extra dirt deposited within pond. Bottoms of ponds need to be smoothed ASAP	Hold water through spring, summer, and fall. Spot spray	VA PUP
ond B	Sp 14 sh	oring and fall migrating	rovide 225 acres of all foraging habitat or migrating	Levees cut down and reworked in Fall 2004, new pipes nstalled. Extra dirt deposited within pond. Bottoms of ponds need to be	Early drawdown, disk, smooth bottom, and reflood. Draw down in August for	VA

		· · · · · · · · · · · · · · · · · · ·				
Pond C	2	0 Wintering diving ducks	Provide 190 acres of moist-soil habitat for over-wintering waterfowl		Hold water to promote growth of Sagittaria. Spray ludwigia with "AIM" i approved	f N/A
Pond D	1	Spring and fall migrating 8 shorebirds	Provide 225 acres o fall foraging habitat for migrating shorebirds	installed. Extra dirt deposited within pond. Bottoms of ponds need to be smoothed ASAP	Early drawdown, disk, smooth bottom and reflood. Draw down in August for shorebirds.	N/A
Pond E	16	Wintering dabbling ducks spring migrating 5 shorebirds	Provide 190 acres of , moist-soil habitat for over-wintering waterfowl	pond. Bottoms of ponds need to be smoothed ASAP	Early drawdown, smooth impoundmen bottom. Spot spray willows as needed	
Pond F	17	Spring and fall migrating shorebirds	Provide 225 acres of fall foraging habitat for migrating shorebirds	pond. Bottoms of ponds need to be smoothed ASAP	Early drawdown, disk, smooth bottom, and reflood. Draw down in August for shorebirds.	N/A
ond G	16	Wintering dabbling ducks, spring migrating shorebirds	Provide 190 acres of moist-soil habitat for over-wintering waterfowl	Levees cut down and reworked in Fall 2004, new pipes installed. Extra dirt deposited within pond. Bottoms of ponds need to be smoothed ASAP	Early drawdown, smooth impoundment bottom. Spot spray willows as needed	PUP
ond H	17	Wintering diving ducks	Provide 190 acres of moist-soil habitat for over-wintering waterfowl	deposited within pond. Bottoms of ponds need to be smoothed ASAP	Hold water through spring, summer, and fall. Spray ludwigia with "AIM" if approved.	PUP
ond I		Spring and fall migrating	Provide 225 acres of fall foraging habitat for migrating shorebirds	pond. Bottoms of ponds need to be smoothed ASAP	Early drawdown, disk, smooth bottom, and reflood. Draw down in August for	N/A
nd J		Wintering dabbling ducks, spring migrating	Provide 190 acres of moist-soil habitat for over-wintering	oond. Bottoms of conds need to be	Early drawdown, smooth impoundment oottom. Spot spray willows as needed	PUP

Pond K	18	Wintering dabbling ducks, spring migrating shorebirds	Provide 190 acres of moist-soil habitat for over-wintering waterfowl	Levees cut down and reworked in Fall 2004, new pipes installed. Extra dirt deposited within pond. Bottoms of ponds need to be smoothed ASAP Levees cut down and reworked in Fall 2004, new pipes installed. Extra dirt	Early drawdown, smooth impoundment bottom. Spot spray willows as needed	PUP
Pond L	18	Spring and fall migrating shorebirds	Provide 225 acres of fall foraging habitat for migrating shorebirds	deposited within pond. Bottoms of ponds need to be smoothed ASAP	disk, smooth bottom, and reflood. Draw down in August for shorebirds.	N/A
Pond M	21	Wintering dabbling ducks	Provide 190 acres of moist-soil habitat for over-wintering waterfowl	Levees cut down and reworked in Fall 2004, new pipes installed. Thick growth of willows (mostly less that 2 inches dbh)	Early drawdown followed by mechanical removal of willows (bulldozer or excavator) and spraying if necessary.	PUP
Pond N/O	500	Wintering dabbling ducks, spring migrating shorebirds	Provide 190 acres of moist-soil habitat for over-wintering waterfowl	Levees cut down and reworked in Fall 2004, new pipes installed. Levee separating into 2 smaller units removed. Extra dirt deposited within pond covering 2004 moist soil vegetation. Bottoms of ponds need to be smoothed ASAP	Early drawdown, smooth impoundment bottom.	N/A
Pond PP		Wintering dabbling ducks,	moist-soil habitat for over-wintering waterfowl. Control	down and reworked in Fall 2004. Extra dirt deposited within pond covering 2004 moist soil vegetation. Pond invaded by willows. Bottoms of ponds need to be	Mid-season draw down (start draw down at least 3 weeks after willow seed out), smooth impoundment bottom. Spot spray willows as needed. Evaluate potential as habitat for secretive	PUP
Pond P		Wintering dabbling ducks,	Provide 190 acres of moist-soil habitat for over-wintering waterfowl. Control	pond covering 2004 moist soil vegetation. Pond invaded by willow. Has established stand of older willows and button bush. Bottoms of ponds need to be	prevent additional	PUP

Pond Q	1	18 Fall migrating shorebirds	Provide 225 acres of fall foraging habitat for migrating shorebirds		and spot spray edge	it. 1
Pond R	2	11 Secretive Marshbirds	Emergent marsh	Diverse assemblage of emergent vegetation	throughout to promote growth of rushes and cattails and restrict growth owody vegetation.  Spot spray willows a necessary	1
Pond S	18	Wintering diving ducks, B invasive species control	Provide 190 acres or moist-soil habitat for over-wintering waterfowl. Control willow (Salix nigra)	Patch of willows in nw portion of pond. Willows moving into other areas as well.	Hold water through spring, summer, and fall. Spot spray	
Pond T		Fall migrating shorebirds	Provide 225 acres of fall foraging habitat for migrating shorebirds		willows with Rodeo.  It Hold water through summer. Begin slow drawdown in August	
Pond U	16	Spring and fall migrating shorebirds	Provide 225 acres of fall foraging habitat for migrating shorebirds	Mid-season drying in 2004 produced diverse stand of moist soil vegetation.	Early drawdown, disk, smooth bottom, and reflood. Draw down in August for shorebirds.	N/A
<sup>2</sup> ond V	16	Wintering dabbling ducks, invasive species control	Provide 190 acres of moist-soil habitat for over-wintering waterfowl. Control Lotus (Nelumbo lutea)	Healthy stand of lotus	Early drawdown. Reflood with winter rain (i.e. leave dry as	
Pond W			Provide 190 acres of	Open water with little		N/A PUP
ond X	15	Secretive Marsh birds	Emergent marsh	Diverse assemblage of emergent vegetation	throughout to promote growth of rushes and cattails and restrict growth of woody vegetation. Spot spray willows as	PUP
hroughout	2374	nvasive control	No measurable	Nutria causing extensive damage to levee system. Seen frequently, particularly in spring	Remove nutria through trapping and shooting, particularly	N/A
nroughout	2374		objective developed. Maintain and monitor wood duck nest	Six wood duck nest	Remove/board up boxes from ponds and relocate to borrow pits	VA

Management Unit	Acres	Conservation Target(s) (Habitat/Wildlife)	Habitat Objective	Current Condition	Management Prescription	Supporting Documentation	Habitat Response	Wildlife Response	Unmet Habitat Needs	Strategies to Achieve Unmet Habitat Needs
			Provide 295 acres of							
			old field habitat for							
		1	grassland birds and							
			other early		Mow after August 1		NA August 0			
			successional		to prevent		Mowed August 8 -			
			species (i.e. rabbits		colonization by	A 1 / A	11. Did not evaluate	Did not evaluate		1
Field 1	31	Birds		Fallow Field	woody vegetation	N/A	habitat response	Did not evaluate		
			Provide 295 acres of				l			
			old field habitat for				No.			
		1	grassland birds and				Mowed			
		1	other early		Mow after August 1		approximately 40			
			successional		to prevent		acres August 8 - 11			
		Fallow Fields/ Grassland	species (i.e. rabbits		colonization by		Did not evaluate			
Field 2	85	Birds	and quall)	Fallow Field	woody vegetation	N/A	habitat response	Did not evaluate		
10.00			Provide 295 acres of							
		II v	old field habitat for							
			grassland birds and							
			other early		Mow after August 1					
			successional		to prevent		Mowed August 8 -			
	1	Fallow Fields/ Grassland	species (i.e. rabbits		colonization by		11. Did not evaluate			
Fullo	7,		and quail)	Fallow Field	woody vegetation	N/A		Did not evaluate		
Field 3	12	Birds		1 BIOW I IOIG	Woody Vogotation	1471				
			Provide 295 acres of							
	l		old field habitat for							
	l		grassland birds and		Manua - Manua					
	l		other early		Mow after August 1		l			
	ı		successional		to prevent		l .			
	Ι.	Fallow Fields/ Grassland	species (i.e. rabbits		colonization by	l				
Fleid 16	24	4 Birds	and quail)	Fallow Field	woody vegetation	N/A	Did not mow	Did not evaluate		
			Provide 295 acres of							
	l	1	old field habitat for				tos o			
	1	1	grassland birds and				Mowed			
	1	1	other early		Mow after August 1		approximately 18			
			successional		to prevent		acres August 8 - 11.			
	1	Fallow Fields/ Grassland	species (i.e. rabbits		colonization by		Did not evaluate			
Field 17	l as	2 Birds	and quall)	Fallow Field	woody vegetation	N/A	habitat response	Did not evaluate		
TIBIQ 17	<del></del>	Blidd	une quality		See below. In		Most units dried			
	1	1			general spot spray	0	purposely or on own			
	ı	l l			willows as needed		by Sept. Units A - L			
	1	1			with Rodeo. If heavy	,	fully boarded by Oct.			
	1	1			infestation of	1	1 to catch fall rains.			
	I				coffeeweed occurs,	1	Drought conditions			
	1				try to flood and		through fall.			
	1	1					Reflooded Units A -	Due to drought		
	1	1			overtop soon after	l d	L by mid-Dec	conditions, any unit		
l	I	1			germination.		Transmission of the second			
	1	1			Otherwise, try to cut		Partially reflooded	with water supported a		
	1		Specific objectives		(high blade) prior to	L	units S - V by mid-	large number of ducks		
Catfish Ponds	42	O Specific targets below	below	See below	seed set.	N/A	Dec.	and geese during Dec.		
								Trapped wood ducks		
	1							on pond in July. Use		
	1							by waterfowl and		1
	4			Levees cut down				waders throughout		
	1			and reworked in Fall	1			summer and fall-never	Need to burn slash	
1	1	1		2004, new pipes				huge numbers. Used	piles from levee	
	1			installed. Extra dirt				by large numbers of	work. Standing	
	1		Provide 190 acres of	4.	Hold water through	1.	Willows sprayed	white-fronted geese	willows in unit	
			moist-soil habitat for	pond. Bottoms of	spring, summer, and	4l	6/30. Held water	and some ring-billed	appear deadburn	Dry at least to piles by
	1			ponds need to be	fall. Spot spray	1	through summer.	gulls until brought to	in place? Nutria	September 1. Burn
L	1	And the state of t	over-wintering	F	willows with Rodeo.	DLID	Reflooded 12/12/05.	DESCRIPTION OF THE PROPERTY AND THE PROP	issue	slash piles and reflood.
Pond A	1 1	6 Wintering diving ducks	waterfowl	smoothed ASAP	IMITIONS WITH LOGGO.	II-OE	I WILLOWS IN INCOME.	The Book willing book		

							Willows sprayed	Good use by waders as pond dried. When		
	1			Levees cut down			6/30. Dried on own	initially started		
1	1	l.		and reworked in Fall			by 8/1/05. Tried			l I
1	1							pumping, got		Davis luca I las
1	1			2004, new pipes			pumping water 8/17,	Immediate shorebird		Dry by June, Use
1	1			installed. Extra dirt	Early drawdown,		but pump shutdown	response. Quickly left		breaking plough then
1	1		Provide 225 acres of	deposited within	disk, smooth bottom,		within 24 hrs	as pond dried		disk to smooth bottom
1	1		fall foraging habitat	pond. Bottoms of	and reflood. Draw		mechanical	completely. Once	Need to smooth	and dry willows.
1	1	Spring and fall migrating	for migrating	ponds need to be	down in August for		problems,	reflooded in Dec., good	bottom and prevent	Reflood and hold water
Pond B	14	shorebirds	shorebirds	smoothed ASAP	shorebirds.	N/A	Reflooded Dec. '05	duck response.	willow colonization.	rest of year.
				Levees cut down						
1	1			and reworked in Fall				Heavy use by waders		
1	1			2004, new pipes				(including roseate		
1	1			installed. Extra dirt	Hold water to		Spot sprayed	spoonbills) while		
l	1		Provide 190 acres of		promote growth of		10.1	drying. Once		I I
ı	1			pond. Bottoms of	Sagittaria Spray			reflooded, used by		
1	1	I'	over-wintering	ponds need to be	ludwigia with "AIM" if		mid-Aug. Reflooded			
Pond C	20	Wintering diving ducks	waterfowl	smoothed ASAP	approved	PUP	in Dec. '05	ducks	nutria issue	
roid C		Wintening diving ducks	Wateriowi		approved	FOF	In Dec. 05	UUCKS.	HUIHA ISSUE	
1	1			Levees cut down and reworked in Fall						
1	1							04		l I
1	1	l'		2004, new pipes				Good use by waders		l I
1	1			installed. Extra dirt	Early drawdown,		Spot sprayed	as dried (500+ egrets,		
1	1			deposited within	disk, smooth bottom,		willows 6/30. Dried	50 white lbis, mostly		l'
1	1		fall foraging habitat	pond. Bottoms of	and reflood, Draw		on own by mid-	immature). Heavy use	Need to smooth	l l
	1 .	Spring and fall migrating	for migrating	ponds need to be	down in August for		August Reflooded	by ducks once	bottom and prevent	1
Pond D	18	shorebirds	shorebirds	smoothed ASAP	shorebirds	N/A	in Dec. '05	reflooded.	willow colonization.	
							Began drawdown			
1	1						3/28. Mostly dry by			
1	1						6/9. Willows			
1	1						sprayed week of			l I
1	1						6/20. Vegetation			l I
ı	1						evaluated 7/6.		1	I I
1	1						Greater than 10%			
ı	1						coverage of millet			I I
1	1						(22.5%), coffeeweed	Black-necked stilts		1 1
1	1			Levees cut down			(14.1%), cockleburr	attempted nesting		I I
1	1			and reworked in Fall			(11.7%), and sedge	found 4 eggs (being		) I
1	1			2004, new pipes			(10.8%).	incubated) on 6/9	Dld not smooth	
1	1			installed. Extra dirt	Carbi drawdawa		Reboarded 9/29	Abandoned during the	bottoms. Mounded	
1			Dunida 100 pares of		Early drawdown,	hi .				
1	1			deposited within	smooth		drought. Pond	next week, probably	vegetation results in	
1		Wintering dabbling	moist-soil habitat for		impoundment		reflooded beginning	due to pond drying.	uneven drying.	
		ducks, spring migrating	over-wintering	ponds need to be	bottom. Spot spray		11/18. No signif.	Waterfowl responded	Some debris	
Pond E	16	shorebirds	waterfowl	smoothed ASAP	willows as needed	N/A	water until 12/7.	well once reflooded.	mounds present.	
		1		Levees cut down					1	
1	1			and reworked in Fall					1	
1				2004, new pipes					I	
1				installed. Extra dirt	Early drawdown,				I	1
1			Provide 225 acres of	deposited within	disk, smooth bottom,		1		L	
1				pond. Bottoms of	and reflood. Draw		Dried on own by mid	1	Need to smooth	
			Hall Draullu Habitat	Iporia, politims or						
1	1	Spring and fall migrating	for migrating	ponds need to be	down in August for		August Reflooded	Heavy use by ducks	bottom and prevent	

							Began drawdown			
1							3/28. Held some			
1							water through mid-			
							June. Willows			
1						i				
1							sprayed 6/22-24.	ľ		
							Vegetation		Even with spraying,	
							evaluated 7/6.		still heavy	
							Greater than 10%		concentration of	
1				Levees cut down			coverage of millet		willows. Did not	
	1			and reworked in Fall			(13.8%) and		smooth bottoms.	
1							,		Mounded vegetation	
1				2004, new pipes			coffeeweed (11,3%).			
					Early drawdown,		Reboarded 9/29		causes uneven	
1		1	Provide 190 acres of	deposited within	smooth		drought Pond		dryingpockets of	
I		Wintering dabbling	moist-soil habitat for	pond. Bottoms of	impoundment		reflooded beginning		high quality habitat	
1		ducks, spring migrating	over-wintering		bottom. Spot spray		11/18. No signif.	Heavy use by ducks	surrounded by	
Pond G	16	shorebirds	waterfowl	smoothed ASAP	willows as needed	PUP	water until 12/7.	once reflooded.	coffeeweed	
I SIN G	10	onor obii da	77440110771	Levees cut down			The state of the s			
				and reworked in Fall						
I										
	l .			2004, new pipes						
I				Installed. Extra dirt	Hold water through					
		1	Provide 190 acres of	deposited within	spring, summer, and		l			
		1	moist-soil habitat for	pond. Bottoms of	fall, Spray ludwigia		Held water through	Use by white-fronted		
1		I i	over-wintering	ponds need to be	with "AIM" if		most of summer.	geese and ducks once	nutria issue, slash	
Pond H	1 17	Wintering diving ducks	waterfowl	smoothed ASAP	approved	PUP	Reflooded 12/12/05.	reflooded	plies	
T STIGET		Trittering driving decision		Levees cut down			Willows sprayed			
	l			and reworked in Fall			6/30. Held some			
1	l						water through	)	Mounded vegetation	
1	l			2004, new pipes						
1	l				Early drawdown,		summer, Partial	Stronger response by	causes uneven	
l .	l		Provide 225 acres of	deposited within	disk, smooth bottom,		drawdown for	waders than shorebird	dryingmade drying	
	ı		fall foraging habitat	pond. Bottoms of	and reflood. Draw		shorebirds	during drawdown.	for shorebirds	
	l	Spring and fall migrating	for migrating	ponds need to be	down in August for		beginning 7/25.	Good duck once	difficult, Nutria	
Pond I	14	shorebirds	shorebirds	smoothed ASAP		N/A	Reflooded 12/7/05.	reflooded	issue.	[]
							Began drawdown			
					1		3/28. Dry by 5/23.			
					1		Willows sprayed	l		1
		IX .						1		ll 'i
		1					6/20. Vegetation	l .		
		1					evaluated 7/20.			
							Greater than 10%			
	l .			Levees cut down			coverage of	Killdeer nesting in unit		
				and reworked in Fall		)-i	smartweed (46.4%),	In May. Fair duck		
				2004, new pipes			millet (27.9%), and	response once	Mounded vegetation	
				installed. Extra dirt	Early drawdown,		spike rush (15%).	reflooded. Vegetation	causes uneven	
		El .	Dunida 100 perf				Reboarded 9/29	may be too thick for	drying. Need to	
1			Provide 190 acres of	deposited within	smooth					
		Wintering dabbling		pond. Bottoms of	impoundment		drought, Pond	easy landing. Better	smooth bottom and	
		ducks, spring migrating	over-wintering	ponds need to be	bottom. Spot spray		reflooded beginning	response once flooded	prevent willow	
Pond J	20	shorebirds	waterfowl	smoothed ASAP	willows as needed	PUP	11/9.	about 1 month.	colonization.	

						Began drawdown			- 1
	1 1					3/28. Dry by mld-			
						June. Willows			
						sprayed 6/20-22			
						Vegetation	1		
	1 1					evaluated 8/5.			
							Heavy use by ducks as		
						coverage of	soon as reflooded		
	1 1	i i					(1000+ ducks on		
						***************************************	11/17). Coffeeweed		J
			Levees cut down			sprangletop		1	
			and reworked in Fall			36.00	overstory appears to		
			2004, new pipes			(12.1%), and		Even with spraying,	1
				Early drawdown,		smartweed (11.7%).	but is sparse enough	still heavy willow	
	1. 1			smooth		Reboarded 9/29	that ducks can get in	concentration. Need	
						drought. Pond	fairly easily. Sprayed	to smooth bottom	(
			pond. Bottoms of	Impoundment				and prevent willow	
	ducks, spring migrating			bottom. Spot spray	L		areas provide landing		
Pond K	18 shorebirds	waterfowl	smoothed ASAP	willows as needed	PUP	11/10.	areas.	colonization.	
						Began drawdown			
						6/9. Had already			
				l i		begun to dry (down			
						about 2 feet).			
						Sprayed willows 7/7-			
	1 1					8. Vegetation			
						evaluated 8/5.		'	
						Greater than 10%			
			Lavara and alasses			coverage of sedge	1		l. "
			Levees cut down						
	I II		and reworked in Fall			(40%), sprangletop		From with an analytical	
	1 1.		2004, new pipes			(27.5%), and		Even with spraying,	0 0
			installed. Extra dirt	Early drawdown,		coffeeweed (21.3%)	in May. Good duck	still heavy willow	
	1 1	Provide 225 acres of	deposited within	disk, smooth bottom,		Reboarded 9/29	response once	concentration, Need	
				and reflood. Draw		drought, Pond	reflooded. Excellent	to smooth bottom	i i
		fall foraging habitat	F	15.1		reflooded beginning	duck response by	and prevent willow	(1)
		for migrating	ponds need to be	down in August for	N 1 / 0			colonization.	
Pond L	18 shorebirds	shorebirds	smoothed ASAP	shorebirds.	N/A	11/14.	December	COIONIZATION	
			Levees cut down	Early drawdown		l .			1
	1 1		and reworked in Fall	followed by		l .			
			2004, new pipes	mechanical removal				Need pumping	Push willows into slash
	1 1	Provide 190 acres of	installed. Thick	of willows (bulldozer		Began drawdown	P 3	capability and to	piles and burn. May try
	E (1)					3/28. Bulidozed		remove downed	breaking plow and see if
	l I	moist-soil habitat for	growth of willows	or excavator) and			Dill	willows and smooth	able to break up
		over-wintering	(mostly less that 2	spraying if		willows in late June.	Still no water as of		
Pond M	21 Wintering dabbling ducks	waterlowl	inches dbh)	necessary.	PUP	Left where they lay.	December 19.	pond bottom.	willows.
						Began drawdown			
1	1 8					4/1. Most of unit dry			
1	1 1					by mid-June.			
	1 1								
	1 1					Sprayed willows			
						6/20 (except SE 1/4-	1		
1						this area never dried			
1	1 1		Levees cut down	1		completely).		1	
I	1 1		and reworked in Fall			Vegetation		1	
	1 1					evaluated 8/8 in			
	1 1		2004, new pipes						
1					I	northern 1/2.	1	10	I .
			installed. Levee				1		
			installed. Levee separating into 2			Greater than 10%			
			separating Into 2			Greater than 10% coverage of sedge		Need pumping	
			separating into 2 smaller units			coverage of sedge		Need pumping capability and	
			separating Into 2 smaller units removed, Extra dirt			coverage of sedge (15%), smartweed		capability and	
			separating Into 2 smaller units removed, Extra dirt deposited within			coverage of sedge (15%), smartweed (10.8%), and		capability and smooth pond	
			separating Into 2 smaller units removed, Extra dirt deposited within pond covering 2004			coverage of sedge (15%), smartweed (10,8%), and sprangletop (10%).		capability and smooth pond bottom. Wcs at NE	
		Provide 190 acres of	separating Into 2 smaller units removed, Extra dirt deposited within pond covering 2004	Early drawdown,		coverage of sedge (15%), smartweed (10.8%), and		capability and smooth pond bottom. Wcs at NE cornerhigher than	
	Wintering dabbling		separating Into 2 smaller units removed, Extra dirt deposited within pond covering 2004 moist soil	Early drawdown,		coverage of sedge (15%), smartweed (10,8%), and sprangletop (10%).		capability and smooth pond bottom. Wcs at NE cornerhigher than SE cornerneed to	
	Wintering dabbling	moist-soll habitat for	separating Into 2 smaller units removed, Extra dirt deposited within pond covering 2004 moist soil vegetation, Bottoms	Early drawdown,		coverage of sedge (15%), smartweed (10.8%), and sprangletop (10%). Reboarded 9/29 drought. No	Little to no wildlife use-	capability and smooth pond bottom. Wcs at NE cornerhigher than	
Pond N/O	Wintering dabbling ducks, spring migrating 20shorebirds		separating Into 2 smaller units removed, Extra dirt deposited within pond covering 2004 moist soil	Early drawdown,	N/A	coverage of sedge (15%), smartweed (10.8%), and sprangletop (10%). Reboarded 9/29	Little to no wildlife use-	capability and smooth pond bottom. Wcs at NE cornerhigher than SE cornerneed to	

Pond PP	17	Wintering dabbling ducks, invasive control	Provide 190 acres of moist-soll habitat for over-wintering waterfowl. Control	in Fall 2004. Extra dirt deposited within	Mid-season draw down (start draw down at least 3 weeks after willow seed out), smooth impoundment bottom. Spot spray willows as needed. Evaluate potential as habitat for secretive marshbirds.	PUP	Began draining 3/10 to prepare for levee work. Work completed in December. Structures reboarded 12/6.		Need pumping capability and to remove slash piles and smooth pond bottom and prevent willow colonization.	
			Provide 190 acres of moist-soil habitat for over-wintering waterfowl. Control	Has established stand of older willows and button bush, Bottoms of ponds need to be	down (start draw down at least 3 weeks after willow seed out), smooth impoundment bottom. Spot spray willows as needed to prevent additional		Began draining 3/10 to prepare for levee work. Work completed in December. Structures		Need pumping capability and to remove slash piles and smooth pond bottom and prevent willow colonization.	
Pond Q			willow (Salix nigra)  Provide 225 acres of fall foraging habitat for migrating shorebirds	Dominated by sedge and fall panicum in 2004. Some willows beginning to encroach.	Hold water through summer. Begin slow drawdown in August. Assess willow stand and spot spray edges if necessary to prevent further colonization.	PUP	reboarded 12/6. Began draining 3/15 to prepare for levee work. Work completed in November. Vegetation evaluated 8/8. Greater than 10% coverage for smartweed (34.6%), spike rush (20%), and sedge (11.7%). Levee construction in Oct./Nov. buried much of vegetation. Reboarded 12/6.	No water as of 12/19.	Need pumping capability and to remove slash piles and smooth pond bottom and prevent willow colonization.	
Pond R		Secretive Marshbirds	Emergent marsh	Diverse assemblage of emergent vegetation. Approximately 50% of area covered by willow (Salix nigra) and groundsel-tree (Baccharis halimifolia)	Hold water throughout to promote growth of rushes and cattails and restrict growth of woody vegetation. Cut and spot spray willows and groundsel-tree as necessary	PUP	Began draining 3/15 to prepare for levee work. Work completed in December. Structures reboarded 12/6.	No water as of 12/19.	Need pumping capability and to remove slash piles and smooth pond bottom and prevent willow colonization.	
Pond S	18	Wintering diving ducks, Invasive species control	Provide 190 acres of moist-soll habitat for over-wintering waterfowl. Control	Patch of willows in nw portion of pond. Willows moving into other areas as well. Late drawdown in 2004 produced dense stand of sedge.	Hold water through spring, summer, and fall. Spot spray willows with Rodeo.		Began draining 3/15 to prepare for levee work. Work completed in November. Structures reboarded 12/6. Began pumping 12/12	Unit flooded to about 1/2 pool and fair use by ducks with initial flooding.	Need to smooth bottom, remove slash piles, and prevent willow colonization.	

							Began draining 3/10			
1							to prepare for levee			
1							work. Work			
1							completed in			
1 1	11 11						December.		Need to smooth	
1	11 11		D		I lalal makan klanar mak		Structures	Unit flooded to about	bottom, remove	
	11 11	l l	Provide 225 acres of		Hold water through					
			fall foraging habitat	Central portion of	summer. Begin		reboarded 12/6.	1/2 pool and fair use by		
1			for migrating	unit with declining	slow drawdown in			ducks with initial	prevent willow	
Pond T	19	Fall migrating shorebirds	shorebirds	buttonbush stand.	August	N/A	12/14	flooding	colonization	
							Began draining 3/15			
1 1							to prepare for levee	T .		
1 1							work. Work			
l I	1 1						completed in			
1 1				8.40 L S S	E also to the				Need to smooth	
1 1			1	Mid-season drying in			November,			
1 1				2004 produced	disk, smooth bottom,		Structures	Unit flooded to about	bottom, remove	
1 1			fall foraging habitat	diverse stand of	and reflood. Draw		reboarded 12/6.	1/2 pool and fair use by		
l I		Spring and fall migrating	for migrating	molst soil	down in August for		Began pumping	ducks with initial	prevent willow	
Pond U		shorebirds	shorebirds	vegetation.	shorebirds.	N/A	12/6.	flooding	colonization	
							Began draining 3/10			
1							to prepare for levee			
1 1							work. Work			l l
1										n l
			Provide 190 acres of				completed in		ļ.,	
			moist-soil habitat for				December,		Need to smooth	
			over-wintering	lotus established in	Early drawdown.		Structures	Unit flooded to about	bottom, remove	
		Wintering dabbling	waterfowl. Control	middle of unit. Has	Reflood with winter		reboarded 12/6.	1/2 pool and fair use by	slash piles, and	
		ducks, invasive species	Lotus (Nelumbo	potential to spread	rain (i.e. leave dry as		Began pumping	ducks with initial	prevent willow	
Pond V	16	control	lutea)	throughout	long as possible).	N/A	12/6	flooding	colonization.	
T OHQ V	- 10	GOT III GI	latouj	i i i cagnodi.	long as possible).	1071	Began draining 3/15	nooding.	GO:OHIZAHOHI	
1							to prepare for levee		Need pumping	
1 1		(I								
							work. Work		capability and to	II.
			Provide 190 acres of				completed in		remove slash piles	
		Wintering dabbling	moist-soll habitat for	Open water with little	Early drawdown.		December.		and smooth pond	
		ducks, spring migration	over-wintering	vegetation except	Spot spray willows		Structures		bottom and prevent	
Pond W	15	shorebirds	waterfowl	along shoreline.	as needed.	PUP	reboarded 12/6	No water as of 12/19.	willow colonization.	
T GIRG VV		onor obride	II CALOTTO IVI	along onoronno.	Hold water	-	102-21-400 1-201	110 110101 110 1101		
					throughout to		Began draining 3/15			
									Need pumping	
					promote growth of		to prepare for levee			
					rushes and cattails		work. Work		capability and to	
					and restrict growth		completed in		remove slash piles	
				Diverse assemblage	of woody vegetation.	,A.i	December.		and smooth pond	
				of emergent	Spot spray willows		Structures		bottom and prevent	
Pond X	15	Secretive Marsh birds	Ernergent marsh	vegetation	as necessary	PUP	reboarded 12/6.	No water as of 12/19.	willow colonization.	
							Developed			
							cooperative			
							agreement with			
							Wildlife Services for			
				Nutria causing			beaver and nutria		Continue current	
				extensive damage to			removal, primarily		nutria control efforts,	
			No measurable		Remove nutria		for purpose of		focusing on	
			objective developed.	frequently,	through trapping and		keeping ditches		springtime removal	
	1 1									
			Need to control		shooting, particularly		open. Staff shot 7		and removal as	
Throughout	2374	Invasive control	nutrla	and fall	during drawdowns	N/A	nutria		ponds dry.	
			No measurable							
			objective developed.		Remove/board up		Boxes removed after		Need to erect new	
			Maintain and monitor		boxes from ponds		breeding season		boxes along borrow	
			wood duck nest	Six wood duck nest	and relocate to		from all ponds		pits and remove last	
Throughout	227/	Nesting structures	structures.	boxes present	borrow pits	N/A	except pond U		box on Pond U.	
THOUGHOUL	20/4	raearing arruptiones	ou detailes.	Prives hieself	DOLLOW DIE	I W/A	eveaht hour or		DON OITT OIL D.	

Management Unit	Acres	Conservation Target(s) (Habitat/Wildlife)	Habitat Objective	Current Condition	Management Prescription	Supporting Documentation	Habitat Response	Wildlife Response	Unmet Habitat Needs	Strategies to Achieve Unmet Habitat Needs
			Provide 295 acres of							
1 1			old field habitat for grassland birds and							
1 1			other early		Mow after August 1					
1 1			successional		to prevent		Mowed August 8 -			
1 1		Fallow Fields/ Grassland	species (i.e. rabbits		colonization by		11. Did not evaluate			
Fleid 1	31	Birds	and quail)	Fallow Field	woody vegetation	N/A	habitat response	Did not evaluate	N/A	
			Provide 295 acres of							
1 1			old field habitat for							
1 1			grassland birds and		7).		Mowed			
1 1			other early		Mow after August 1		approximately 40			
1		Fallow Fields / Crassland	successional		to prevent		acres August 8 - 11.			
Field 2	9.5	Fallow Fields/ Grassland Birds	species (i.e. rabbits and quail)	Fallow Field	colonization by woody vegetation	N/A	Did not evaluate habitat response	Did not evaluate		
1 1610 2	- 60	Dilds	Provide 295 acres of	rallow rield	WOODLY Vegetation	IVA	Habitat (esponse	Did flot evaluate		
1			old field habitat for							
1 1			grassland birds and							
1 1			other early		Mow after August 1					
1 1			successional		to prevent		Mowed August 8 -			
		Fallow Fields/ Grassland	species (i.e. rabbits		colonization by		11. Did not evaluate			
Field 3	72	Birds	and quail)	Fallow Field	woody vegetation	N/A	habitat response	Did not evaluate	N/A	
			Provide 295 acres of							
1			old field habitat for				i i			
1			grassland birds and		Manus affine Assessed d					
1			other early successional		Mow after August 1					
1 1		Fallow Fields/ Grassland	species (i.e. rabbits		to prevent colonization by				Did not mow	
Field 16	24	Birds	and quail)	Fallow Field	woody vegetation	N/A	Did not mow	Did not evaluate	insufficient staff	Mow or burn 2006
Tiola to		Birde	Provide 295 acres of	CION FIOID	Woody vogotation	1071	pid flot flots	Did flot Svajdato	II Dalliolojii Diali	Wiett of Built 2000
1			old field habitat for							
1		ľ	grassland birds and				Mowed			
1 1			other early		Mow after August 1		approximately 18			
1 1			successional		to prevent		acres August 8 - 11,			
1 1		Fallow Fields/ Grassland	species (i.e. rabbits		colonization by		Did not evaluate			
Field 17	82	Birds	and quail)	Fallow Field	woody vegetation	N/A	habitat response	Did not evaluate		
					See below. In	,Au	Most units dried			
1 1					general spot spray		purposely or on own			
1 1					willows as needed with Rodeo. If heavy		by Sept. Units A - L fully boarded by Oct.			
1 1					infestation of		1 to catch fall rains.			
1 1					coffeeweed occurs.		Drought conditions			
1 1					try to flood and		through fall.			
1 1					overtop soon after		Reflooded Units A -	Due to drought		
1 1					germination.		L by mid-Dec.	conditions, any unit		
1 1					Otherwise, try to cut		Partially reflooded	with water supported a		
			Specific objectives		(high blade) prior to		units S - V by mid-	large number of ducks		
Catfish Ponds	420	Specific targets below	below	See below	seed set	N/A	Dec.	and geese during Dec		
								Trapped wood ducks		
1 1								on pond in July. Use		
( I								by waterfowl and		
1 1				Levees cut down and reworked in Fall				waders throughout	Need to burn slash	
1 1				and reworked in Fall 2004, new pipes				summer and fallnever huge numbers. Used	piles from levee	
1 1				installed. Extra dirt				by large numbers of	work. Standing	
1 1			Provide 190 acres of	deposited within	Hold water through		Willows sprayed	white-fronted geese	willows in unit	
				pond. Bottoms of	spring, summer, and		6/30, Held water	and some ring-billed	appear deadburn	Dry at least to piles by
, I			over-wintering	ponds need to be	fall. Spot spray		through summer.	guils until brought to	in place? Nutria	September 1. Burn
, 1										

							Good use by waders		
	I I					Willows sprayed	as pond dried. When		
	I I		Levees cut down			6/30. Dried on own	initially started		
			and reworked in Fall			by 8/1/05. Tried	pumping, got		
			2004, new pipes			pumping water 8/17,	immediate shorebird		Dry by June. Use
	I I		installed. Extra dirt	Early drawdown,		but pump shutdown	response, Quickly left		breaking plough then
	1 1	Provide 225 acres of	deposited within	dlsk, smooth bottom,		within 24 hrs	as pond dried		disk to smooth bottom
			pond. Bottoms of	and reflood. Draw		mechanical	completely. Once	Need to smooth	and dry willows.
	Spring and fall migrating	0.0	ponds need to be	down in August for		problems.	reflooded in Dec., good	bottom and prevent	Reflood and hold water
Pond B	14 shorebirds		smoothed ASAP	shorebirds.	N/A	PV	duck response.	willow colonization.	rest of year.
rold B	14 STOTEDINGS	Sildrebilds	Levees cut down	SHOLEDILUS.	IVA	Meliooded Dec. 05	duck response.	WIIIOW COIOTIZATION.	rest or year.
			and reworked in Fall			l	Heavy use by waders		
	1 1					l			
			2004, new pipes	ili i i i i			(including roseate		
			installed. Extra dirt	Hold water to		Spot sprayed	spoonbills) while		
	1 1	Provide 190 acres of		promote growth of			drying. Once		
			pond. Bottoms of	Sagittaria, Spray			reflooded, used by		
			ponds need to be	ludwigia with "AIM" if		mid-Aug, Reflooded			
Pond C	20 Wintering diving ducks	waterfowl	smoothed ASAP	approved	PUP	In Dec. '05	ducks.	nutria issue	
			Levees cut down						
		l I	and reworked in Fall			l			
			2004, new pipes			l	Good use by waders		
		l l	installed. Extra dirt	Early drawdown,		Spot sprayed	as dried (500+ egrets,		
		Provide 225 acres of	deposited within	disk, smooth bottom.			50 white ibis, mostly		
			pond. Bottoms of	and reflood. Draw		on own by mid-		Need to smooth	
	Spring and fall migrating	~ ~	ponds need to be	down in August for		August, Reflooded	by ducks once	bottom and prevent	
Pond D	18 shorebirds		smoothed ASAP	shorebirds.	N/A	In Dec. '05	reflooded.	willow colonization.	
J. J. J. J.	Idianorobildo	e.ioropirad	CITIODITION FIGHT	S.IDIODII GG		Began drawdown		THOR GOIGINZANON.	
						3/28, Mostly dry by			
						6/9. Willows			
	1 1					and the second s			
	I I					sprayed week of			
						6/20. Vegetation			
						evaluated 7/6.			
				1		Greater than 10%			
						coverage of millet			
						(22.5%), coffeeweed	Black-necked stilts		
			Levees cut down			(14.1%), cockleburr	attempted nesting		
			and reworked in Fall			(11.7%), and sedge	found 4 eggs (being		
			2004, new pipes			(10.8%)	Incubated) on 6/9.	Did not smooth	
			installed. Extra dirt	Early drawdown,		Reboarded 9/29	Abandoned during the	bottoms. Mounded	
		Provide 190 acres of		smooth	24	drought. Pond	next week, probably	vegetation results in	
	Wintering dabbling		pond. Bottoms of	Impoundment			due to pond drying	uneven drying.	
	ducks, spring migrating	over-wintering	ponds need to be	bottom. Spot spray		11/18. No signif.	Waterfowl responded	Some debris	
Pond E	16 shorebirds	waterfowl	smoothed ASAP	willows as needed	N/A	water until 12/7.	well once reflooded.	mounds present.	
rond E	raisnoreoiras	warellowi		WIIIDWS as needed	IVA	water until 127.	wall office reliboded.	mounds present.	
			Levees cut down						
l			and reworked in Fall						
			2004, new pipes	L					
			installed. Extra dirt	Early drawdown,					
		(1)	deposited within	disk, smooth bottom,					
		fall foraging habitat	pond. Bottoms of	and reflood. Draw		Dried on own by mid	1	Need to smooth	
	Spring and fall migrating	for migrating	ponds need to be	down in August for		August, Reflooded	Heavy use by ducks	bottom and prevent	
Pond F	17 shorebirds	shorebirds	smoothed ASAP	shorebirds	N/A	in Dec. '05	once reflooded.	willow colonization.	

#### Coldwater River NWR AHWP - 2005 - Evaluation

							Began drawdown			
							3/28. Held some			
							water through mid-			
							June. Willows			
							sprayed 6/22-24.			
							Vegetation		Even with spraying,	
							evaluated 7/6.		still heavy	
1 1							12. 1			
1							Greater than 10%		concentration of	
				Levees cut down			coverage of millet		willows. Did not	
				and reworked in Fall			(13.8%) and		smooth bottoms	
				2004, new pipes			coffeeweed (11,3%).		Mounded vegetation	
				installed, Extra dirt	Early drawdown,		Reboarded 9/29		causes uneven	
			Provide 190 acres of	deposited within	smooth		drought, Pond		dryingpockets of	
		Wintering dabbling	moist-soil habitat for	pond. Bottoms of	Impoundment		reflooded beginning		high quality habitat	
		ducks, spring migrating	over-wintering	ponds need to be	bottom. Spot spray		11/18 No signif	Heavy use by ducks	surrounded by	
Pond G	16	shorebirds	waterfowl	smoothed ASAP		PUP	water until 12/7.	once reflooded.	coffeeweed.	) i
				Levees cut down						
				and reworked in Fall			I			
				2004, new pipes			l			
1				installed. Extra dirt	Hold water through					
			Provide 190 acres of		spring, summer, and		l			
			moist-soil habitat for				Held water through	Lan burnelita frantasi		
		ll V			fall. Spray ludwigia		77.	Use by white-fronted	and the same of the	
D 111			over-wintering	ponds need to be	with "AIM" If		most of summer.	geese and ducks once	nutria issue, slash	
Pond H	17	Wintering diving ducks	waterfowl	smoothed ASAP	approved.	PUP		reflooded	piles	
				Levees cut down			Willows sprayed			
				and reworked in Fall			6/30. Held some			
1				2004, new pipes			water through		Mounded vegetation	
				installed, Extra dirt	Early drawdown,		summer. Partial	Stronger response by	causes uneven	
				deposited within	dlsk, smooth bottom,		drawdown for	waders than shorebird	dryingmade drying	
1			fall foraging habitat	pond, Bottoms of	and reflood, Draw		shorebirds	during drawdown.	for shorebirds	
		Spring and fall migrating	for migrating	ponds need to be	down in August for		beginning 7/25	Good duck once	difficult. Nutria	+
Pond I	14	shorebirds	shorebirds	smoothed ASAP	shorebirds.	N/A	Reflooded 12/7/05	reflooded	issue.	
							Began drawdown			
							3/28. Dry by 5/23.			
							Willows sprayed			
							6/20. Vegetation			
1							evaluated 7/20.			l l
1							Greater than 10%			
				Levees cut down			coverage of	Killdeer nesting in unit		
1						30				
1 1				and reworked in Fall			smartweed (46.4%),	in May. Fair duck	<b></b>	
				2004, new pipes			millet (27.9%), and	response once	Mounded vegetation	
				installed. Extra dirt	Early drawdown,		spike rush (15%).	reflooded. Vegetation	causes uneven	
			Provide 190 acres of		smooth		Reboarded 9/29	may be too thick for	drying. Need to	
		Wintering dabbling	moist-soil habitat for	ľ	Impoundment		drought. Pond	easy landing. Better	smooth bottom and	
		ducks, spring migrating	over-wintering	ponds need to be	bottom, Spot spray		reflooded beginning			
Pond J	20	shorebirds	waterfowl	smoothed ASAP	willows as needed	PUP	11/9.	about 1 month.	colonization.	

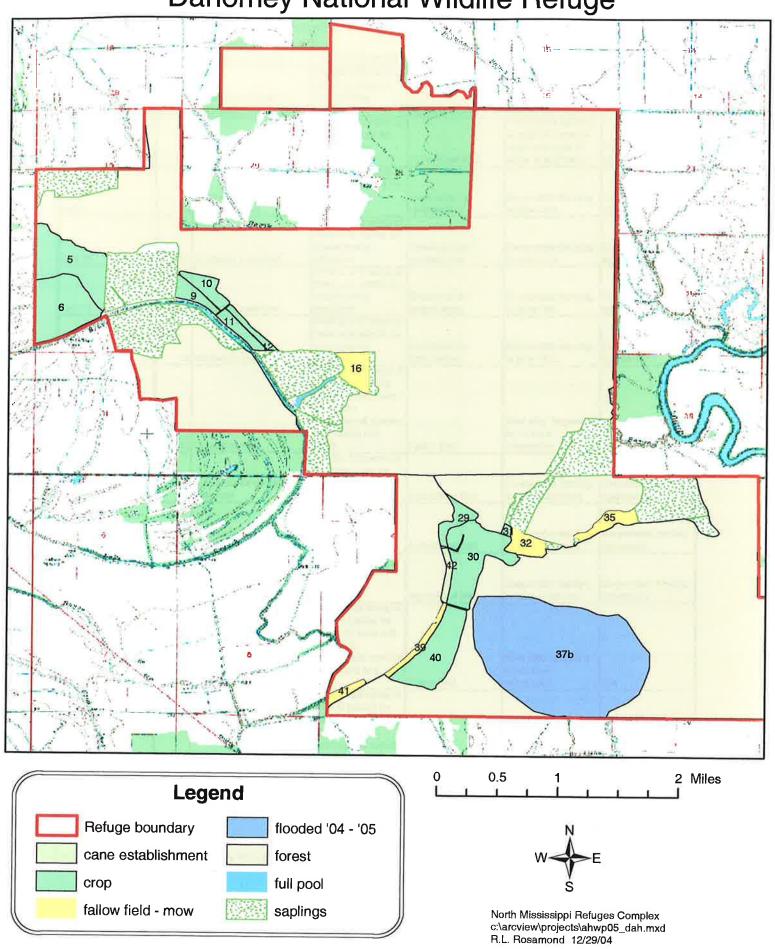
							Began drawdown			
1							3/28. Dry by mld-			
1	l 1						June, Willows			1
l .							sprayed 6/20-22			
	1						Vegetation			
							evaluated 8/5.			
	1							Manager by duals as		
	1						Greater than 10%	Heavy use by ducks as		
							coverage of	soon as reflooded		
1				l.			coffeeweed (23.3%),	(1000+ ducks on		
				Levees cut down			sprangletop	11/17). Coffeeweed		
1				and reworked in Fall			(12,5%), millet	overstory appears to		
1				2004, new pipes			(12.1%), and	provide good cover,	Even with spraying,	
1	1			installed, Extra dirt	Early drawdown,		smartweed (11,7%).	but is sparse enough	still heavy willow	1
1			Provide 190 acres of	deposited within	smooth		Reboarded 9/29	that ducks can get in	concentration. Need	
1	1	Wintering dabbling	moist-soil habitat for	pond. Bottoms of	Impoundment		drought: Pond	fairly easily. Sprayed	to smooth bottom	
1		ducks, spring migrating	over-wintering	ponds need to be	bottom. Spot spray			areas provide landing	and prevent willow	
Pond K	10	shorebirds	waterfowl	smoothed ASAP	willows as needed	PUP	11/10.	areas	colonization.	1
FORU K	10	SHOTODITUS	Wateriowi	SITIOOLIIBU ASAF	WIIIDWS as Heeded	rur		areas.	COIONIZALION	
							Began drawdown			
							6/9. Had already			
	I .						begun to dry (down			
	1						about 2 feet).			
1							Sprayed willows 7/7			
							8. Vegetation			
1	1						evaluated 8/5			
1	1						Greater than 10%			
	1			Levees cut down			coverage of sedge			1
				and reworked in Fall			(40%), sprangletop			
	1			2004, new pipes			(27.5%), and	Killdeer nesting in unit	Even with spraying,	
1	1			Installed. Extra dirt	Early drawdown,		coffeeweed (21,3%).	in May. Good duck	still heavy willow	
1	l .		Provide 225 acres of	deposited within	disk, smooth bottom,		Reboarded 9/29	response once	concentration. Need	
1	l .		fall foraging habitat	pond. Bottoms of	and reflood. Draw		drought. Pond	reflooded. Excellent	to smooth bottom	
1		Spring and fall migrating	for migrating	ponds need to be	down in August for		reflooded beginning	duck response by	and prevent willow	
Pond L	10	shorebirds	shorebirds	smoothed ASAP	shorebirds,	N/A	11/14.	December.	colonization.	1
TOIGL	10	Siloiepiids	Silolebilds	Levees cut down	Early drawdown	IVA	11/14.	December	COIDI IIZALIOI I.	
1	l .			and reworked in Fall	followed by					
1	1				,				Need sumsing	Dueb willews into clash
	l .		Dun 44- 4004	2004, new pipes	mechanical removal		D		Need pumping	Push willows into slash
	l .			installed, Thick	of willows (bulldozer		Began drawdown		capability and to	plies and burn. May try
	1		moist-soil habitat for	growth of willows	or excavator) and		3/28. Bulldozed		remove downed	breaking plow and see if
	1	a	over-wintering	(mostly less that 2	spraying if		willows In late June.	Still no water as of	willows and smooth	able to break up
Pond M	21	Wintering dabbling ducks	waterfowl	inches dbh)	necessary.	PUP	Left where they lay.	December 19.	pond bottom.	willows.
							Began drawdown			
	1						4/1. Most of unit dry			
	1						by mid-June.			
							Sprayed willows			
	l						6/20 (except SE 1/4			
	l						this area never dried			
				Levees cut down			completely)			
	I			and reworked in Fall			Vegetation			
	1			2004, new pipes			evaluated 8/8 in			
				installed Levee			northern 1/2.			
				di -			Greater than 10%			
				separating into 2	1				Naadaum-!	
	1			smaller units			coverage of sedge		Need pumping	
	1			removed. Extra dirt			(15%), smartweed		capability and	
				deposited within			(10.8%), and		smooth pond	
				pond covering 2004			sprangletop (10%)		bottom, Wcs at NE	
	1		Provide 190 acres of	moist soil	Early drawdown,		Reboarded 9/29		cornerhigher than	
	1	Wintering dabbling	moist-soil habitat for	vegetation, Bottoms	smooth		drought. No		SE cornerneed to	
		ducks, spring migrating	over-wintering	of ponds need to be	Impoundment		significant water as	Little to no wildlife use	move or install	
Pond N/O	20	shorebirds	waterlowl	smoothed ASAP	bottom.	N/A	of Dec. 19	no pumping capability	additional wcs.	1

Pond PP	17	Wintering dabbling ducks, invasive control	Provide 190 acres of moist-soil habitat for over-wintering waterfowl, Control willow (Sallx nigra)	Northern levee cut down and reworked in Fall 2004. Extra dirt deposited within pond covering 2004 molest soil vegetation. Pond invaded by willows. Bottoms of ponds need to be smoothed ASAP	Mid-season draw down (start draw down at least 3 weeks after willow seed out), smooth impoundment bottom. Spot spray willows as needed. Evaluate potential as habitat for secretive marshbirds.	PUP	Began draining 3/10 to prepare for levee work. Work completed in December. Structures reboarded 12/6.		Need pumping capability and to remove slash piles and smooth pond bottom and prevent willow colonization.	
Pond P	20	Wintering dabbling ducks, invasive control	Provide 190 acres of moist-soil habitat for over-wintering waterfowl. Control willow (Salix nigra)	Northern levee cut down and reworked in Fall 2004. Extra dirt deposited within pond covering 2004 moist soil vegetation. Pond invaded by willow. Has established stand of older willows and button bush. Bottoms of ponds need to be smoothed ASAP	Mid-season draw down (start draw down at least 3 weeks after willow seed out), smooth impoundment bottom. Spot spray willows as needed to prevent additional germination	PUP	Began draining 3/10 to prepare for levee work. Work completed in December. Structures reboarded 12/6.		Need pumping capability and to remove slash piles and smooth pond bottom and prevent willow colonization.	
Pond Q		Fall migrating shorebirds		Dominated by sedge and fall panicum in	Hold water through summer. Begin slow drawdown in August. Assess willow stand and spot spray edges if necessary to prevent		Began draining 3/15 to prepare for levee work. Work completed in November. Vegetation evaluated 8/8, Greater than 10% coverage for smartweed (34.6%), spike rush (20%), and sedge (11.7%), Levee construction in Oct./Nov. buried much of vegetation.	и	Need pumping capability and to remove slash piles and smooth pond bottom and prevent	
Pond R		Secretive Marshbirds		Diverse assemblage of emergent vegetation. Approximately 50% of area covered by willow (Salix nigra) and groundsel-tree	further colonization.  Hold water throughout to promote growth of rushes and cattalls and restrict growth of woody vegetation. Cut and spot spray willows and groundsel-tree as necessary		Reboarded 12/6.  Began draining 3/15 to prepare for levee work. Work completed in December. Structures reboarded 12/6.		Need pumping capability and to remove slash piles and smooth pond bottom and prevent willow colonization.	
Pond S		Wintering diving ducks, nvasive species control	Provide 190 acres of moist-soil habitat for over-wintering waterfowl. Control	2004 produced dense stand of	Hold water through spring, summer, and fall. Spot spray willows with Rodeo.		Began draining 3/15 to prepare for levee work. Work completed in November. Structures reboarded 12/6. Began pumping 12/12	Unit flooded to about 1/2 pool and fair use by ducks with initial flooding.	Need to smooth bottom, remove slash piles, and prevent willow colonization.	×

. . .

							Began draining 3/10			
1							to prepare for levee			
1		ll i					work. Work			
							completed in			
							December.		Need to smooth	
1			Provide 225 acres of		Hold water through		Structures	Unit flooded to about	bottom, remove	
			fall foraging habitat	Central portion of	summer. Begin		reboarded 12/6.	1/2 pool and fair use by	,	
							31			
		L	for migrating	unit with declining	slow drawdown in	××		ducks with Initial	prevent willow	
Pond T	19	Fall migrating shorebirds	shorebirds	buttonbush stand.	August	N/A	12/14	flooding	colonization.	
							Began draining 3/15			
		1					to prepare for levee			
1							work. Work			
1							completed in			
1 1				Mid-season drying in	Early drawdown.		November		Need to smooth	
1 1	1	1	Provide 225 acres of		disk, smooth bottom.		Structures	Unit flooded to about	bottom, remove	
1 1		li l		diverse stand of	and reflood. Draw		reboarded 12/6.	1/2 pool and fair use by	slash piles, and	
1 1		Spring and fall migrating	for migrating	molst soll	down in August for		172	ducks with initial	prevent willow	
Pond U	10	shorebirds	shorebirds		shorebirds.	N/A	12/6		colonization.	
Pond 0	10	SHOLADILOS	Shorebirds	vegetation	shorebirgs.	IVA		flooding	colonization.	
							Began draining 3/10			
							to prepare for levee			
1							work Work			
1		1	Provide 190 acres of				completed in			
1			moist-soil habitat for	Healthy stand of			December.		Need to smooth	
1 1			over-wintering	lotus established in	Early drawdown		Structures	Unit flooded to about	bottom, remove	
1 1		Wintering dabbling	_	middle of unit. Has	Reflood with winter		reboarded 12/6.	1/2 pool and fair use by	'	
1		ducks, invasive species		potential to spread	rain (i.e. leave dry as		Began pumping	ducks with Initial	prevent willow	
Pond V		control	lutea)	throughout	long as possible).	N/A	12/6.	flooding	colonization.	
r drig v	10	COLLIO	idioa)	throughout	long as possible).	IVA	Began draining 3/15	ilooding.	COIOTIZALIOTI	
1										
1 1							to prepare for levee		Need pumping	
1 1							work. Work		capability and to	
1			Provide 190 acres of		NI CONTRACTOR OF THE CONTRACTO		completed in		remove slash piles	
1		Wintering dabbling	moist-soil habitat for	Open water with little	Early drawdown.		December.		and smooth pond	
		ducks, spring migration	over-wintering	vegetation except	Spot spray willows		Structures		bottom and prevent	
Pond W	15	shorebirds	waterfowl	along shoreline.	as needed.	PUP	reboarded 12/6.	No water as of 12/19.	willow colonization.	
					Hold water					
		11 3			throughout to		Began draining 3/15			l l
1					promote growth of		to prepare for levee		Need pumping	
					rushes and cattails		work. Work		capability and to	
1					1					
				Di	and restrict growth	F.	completed in		remove slash piles	
1			ı	Diverse assemblage			December.		and smooth pond	
L 1		[	I	of emergent	Spot spray willows		Structures		bottom and prevent	
Pond X	15	Secretive Marsh birds	Emergent marsh	vegetation	as necessary	PUP	reboarded 12/6.	No water as of 12/19.	willow colonization.	
				Nutria causing					Continue current	Developed cooperative
				extensive damage to			l		nutria control efforts,	agreement with Wildlife
1			No measurable		Remove nutria				tocusing on	Services for beaver and
				frequently,	through trapping and				springtime removal	nutria removal, primarily
			Need to control		shooting, particularly				and removal as	for purpose of keeping
Throughout	207/	Invasive control	nutria	and fall		NIZA		Staff chat 7 +-i-		
Throughout	23/4	ITIVASIVE CONTO	No measurable	and fall	during drawdowns	N/A		Staff shot 7 nutria	ponds dry.	ditches open.
					L					
1 1			objective developed.		Remove/board up		Boxes removed after		Need to erect new	
			Maintain and monitor		boxes from ponds		breeding season		boxes along borrow	
1			wood duck nest	Six wood duck nest	and relocate to		from all ponds		pits and remove last	
Throughout	2374	Nesting structures	structures.	boxes present	borrow pits	N/A	except pond U.		box on Pond U.	

# Annual Habitat Work Plan 2005 Dahomey National Wildlife Refuge



Management Unit	Acres	Conservation Target (Habitat/Wildlife)	(s) Habitat Objectiv	e Current Condition	Management n Prescription	
			Provide 218 acres		Trescription	Documentation
		Cronlanda	standing crops for		1	
Unit 5	117	Croplands for wintering	overwintering		Cooperative farming	Gooperative farmi
-	117	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement
			Provide 218 acres	of	Cooperative farmin	agreement
		la	standing crops for		to grow 60 acres o	9
Unit 6	104	Croplands for wintering	overwintering		sunflowers and 60	
Office	121	waterfowl	waterfowl	Agricultural field	acres of soybeans.	Cooperative farmi
			Provide 318 acres of	of	dores of soybeans.	agreement
			moist-soil habitat fo	r	1	
Unit 9	00	Wintering waterfowl/dov	e overwintering	Dominated by	Cooperative farming	Cooperative
STILL O	23	field for hunting	waterfowl	undesirables	to grow rice.	
			Provide 318 acres of	of	to grow noc.	agreement
			moist-soil habitat for	r	1	
Unit 10	0.7	1411	overwintering	Dominated by	Cooperative farming	
Silit 10	2/	Wintering waterfowl	waterfowl	undesirables	to grow rice.	
	- 1		Provide 318 acres o	f	to grow rice,	agreement
			moist-soil habitat for	-		
Jnit 11	امم	VAID-LE	overwintering	Dominated by	Cooperative farming	Cooperation
	22	Wintering waterfowl	waterfowl	undesirables	to grow rice.	
			Provide 318 acres of		to grow rice.	agreement
	1		moist-soil habitat for		1	l .
Init 12	446	Affarance	overwintering	Dominated by	Cooperative farming	Comment
- THE 12	14 \	Wintering waterfowl	waterfowl	undesirables	to grow rice.	Cooperative farmin
1			Provide 104 acres of		to grow rice.	agreement
			old field habitat for	1		
1	- 1		grassland birds and			
	- 1		other early		1	1
	- 1		successional species		Mow after August 1	1
nit 16	22		(i.e. rabbits and	1	to set back	
	3/16	Brassland birds	quail).	Fallow field	succession	L
			Provide 218 acres of		30000331011	N/A
		Colonia Colonia III	standing crops for			
nit 29	25	roplands for wintering	overwintering		Cooperative farming	C
	25 W	raterfowl	waterfowl	Agricultural field	to grow soybeans.	Cooperative farming
			Provide 218 acres of	John Miles	to grow soybeans.	agreement
	ام		standing crops for			
it 30	110	roplands for wintering	overwintering	4	Cooperative farming	C
	TISW	aterfowl	waterfowl	Agricultural field	to grow soybeans.	Cooperative farming
	- 1		Provide 218 acres of	A CONTRACTOR OF THE CONTRACTOR	to grow soybeans.	agreement
1	ام		standing crops for			
it 31	O		overwintering		Cooperative farming	C
	3 Wa		waterfowl	Agricultural field	to grow soybeans.	Cooperative farming
			Provide 104 acres of		e grow soyueans.	agreement
			old field habitat for	ľ		
1	- 1	1	grassland birds and			
	- 1		other early	1	A	
1	- 1		successional species	1.	Now after August 1	
132	2010-		(i.e. rabbits and	it	set back	
	ZOGR		quail).			N/A
- 1	1		Provide 104 acres of		- AMSONALI	WA
1	- 1		old field habitat for		1	
J	- 1	9	grassland birds and		1	
ı	- 1	I	other early	1	ı	
	- 1	5	successional species	ĺ.	low after August 1	
35	07		i.e. rabbits and		set back	W
	2/ Gra		uail).	-D. C. L.		1/4
			lood greentree	81	4000001011	VA
	- 1	re	eservoir at least	ь	laco hoords !-	
	- 1	o	nce every 3 - 5		lace boards in	
		I.	ears between	SI	ructure December	
I		13	cars dermeen i		2004 4 "	
1	1	l'o	ecember 1 and		2004 and allow to	
37b 5		D	ecember 1 and larch 15 to mimic	fil	2004 and allow to naturally. Pull pards no later than	

			Provide 104 acres of			
		L.	old field habitat for			
			grassland birds and			
	1	ľ	other early	1	1	J
	1 1		successional species	İ	Mow after August 1	
			(i.e. rabbits and		to set back	
Unit 39	18	Grassland birds	quail).	Fallow field	succession	N/A
OTHE GO	+	Grazola la biras	Provide 218 acres of	T GATOTY HOLD	Dadoucion	-
			standing crops for			
	1	Croplands for wintering	overwintering		Cooperative farming	Cooperative farming
Unit 40	104	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement
Offic 40	104	wateriowi	Provide 104 acres of	Agricultural lield	to grow soyueans.	agreement
	1					
			old field habitat for			
	1		grassland birds and			
			other early	l		
			successional species	ľ	Mow after August 1	l
e this cut!			(i.e. rabbits and		to set back	
Unit 41	13	Grassland birds	quail).	Fallow field	succession	N/A
Unit 42 Throughout		Canebrake reestablishment  Nesting structures	No measurable objectives developed. Continue to work with University of Memphis to develop methods of promoting the establishment and expansion of canebrakes.  No measurable objective developed. Maintain and monitor wood duck nest structures.	Fallow field  Thirty-five wood duck nest boxes present, though some need replacement and relocation.	Plant cane rhizomes in 4 x 4 grids throughout area to test the impact of competition on cane plantings. Mow around existing plantings to differentiate plantings.  Rotate approximately 1/2 of the boxes to face away from the water to attempt to decrease dump nesting	SUP
Throughout	9691	Invasive Control	No measurable objective developed. Begin removal of feral hogs.		Use bait to attract hogs and dispatch with firearms. Investigate an agreement with Delta State to incorporate parasitology or other research aspect.	SUP

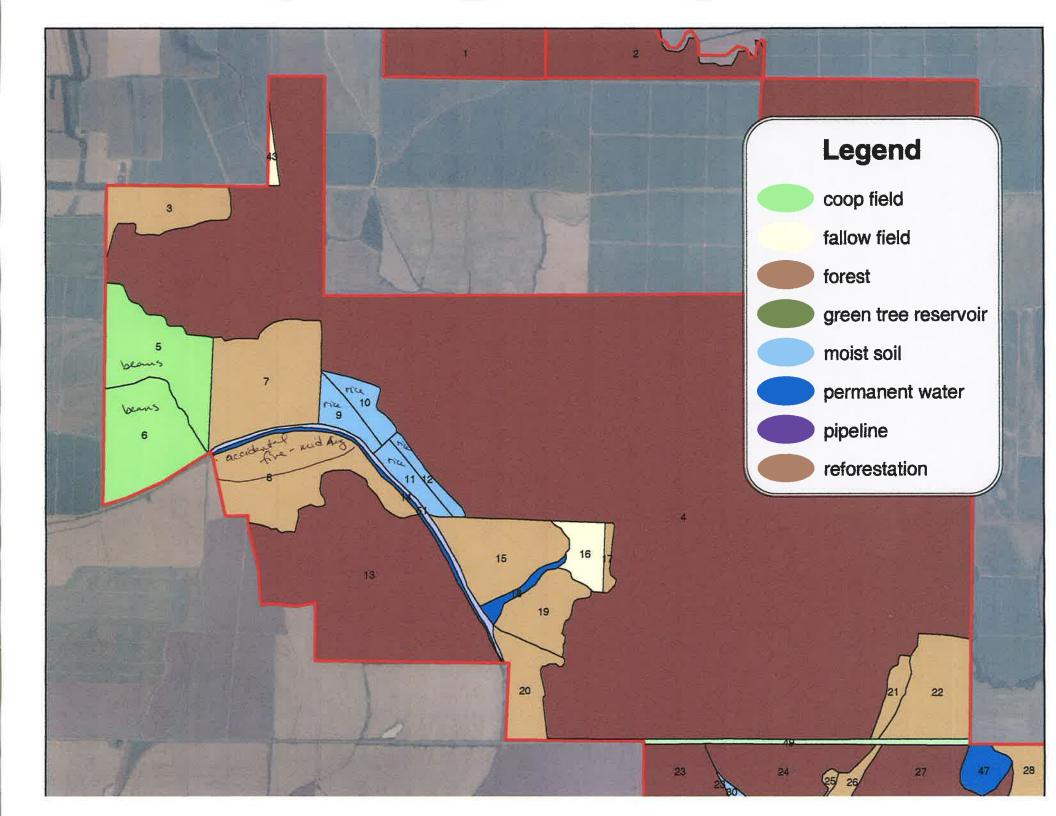
Management Unit	Acres	Conservation Target(s) (Habitat/Wildlife)	Habitat Objective	Current Condition	Management Prescription	Supporting Documentation	Habitat Response	Wildlife Response	Unmet Habitat Needs	Strategies to Achiev Unmet Habitat Need
			Provide 218 acres of							
			standing crops for							
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	Soybean crop			
Jnit 5	117	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
			Provide 218 acres of		Cooperative farming					
			standing crops for		to grow 60 acres of					
		Croplands for wintering	overwintering		sunflowers and 60	Cooperative farming	Soybean crop			
Jnit 6	121	waterfowl	waterfowl	Agricultural field	acres of soybeans	agreement	produced	Not evaluated	N/A	N/A
			Provide 318 acres of							
			moist-soil habitat for							
V		Wintering waterfowl/dove	overwintering	Dominated by	Cooperative farming	Cooperative farming				
Jnit 9	23	field for hunting	waterfowl	undesirables	to grow rice.	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 318 acres of							
			moist-soil habitat for							
			overwintering	Dominated by	Cooperative farming	Cooperative farming				
Jnit 10	27	Wintering waterfowl	waterfowl	undesirables	to grow rice	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 318 acres of							
			moist-soil habitat for							
			overwintering	Dominated by	Cooperative farming	Cooperative farming				
Jnit 11	22	Wintering waterfowl	waterfowl	undesirables	to grow rice.	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 318 acres of			17.1				
			moist-soil habitat for							
			overwintering	Dominated by	Cooperative farming	Cooperative farming				
Jnit 12	14	Wintering waterfowl	waterfowl	undesirables	to grow rice.	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 104 acres of							
			old field habitat for							
			grassland birds and							
			other early							
			successional		Mow after August 1					
			species (i.e. rabbits		to set back		Not mowed-			
Jnit 16	37	Grassland birds	and quail).	Fallow field	succession	N/A	insufficient staff			
			Provide 218 acres of				Soybean crop			
			standing crops for				produced (Now			
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	combined with unit			
Jnit 29	25	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	30)	Not evaluated	N/A	N/A
			Provide 218 acres of							
	1		standing crops for			A1				
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	Soybean crop			I.
Jnit 30	119		waterfowl	Agricultural field	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
			Provide 218 acres of							
			standing crops for							l'i
			overwintering		Cooperative farming	Cooperative farming	Sovbean crop			
Jnit 31	3	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
			Provide 104 acres of		***					
			old field habitat for							
	1		grassland birds and			:				D.
			other early							1
			successional		Mow after August 1					II.
		V.	species (l.e. rabbits		to set back		Not mowed-			
Jnit 32	28	Grassland birds	and quall).	Fallow field	succession	N/A	insufficient staff	Not evaluated		17

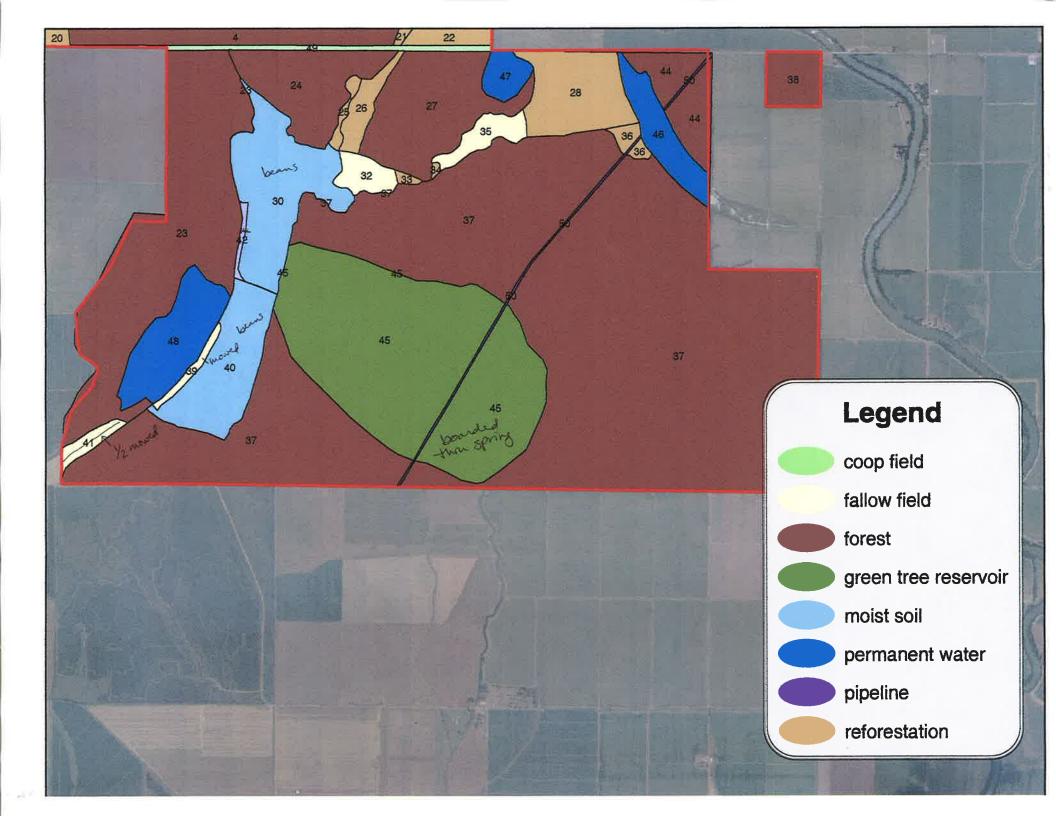
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			Provide 104 acres of					l l		
			old field habitat for							
		1	grassland birds and							
			other early							
			successional		Mow after August 1					
			species (i.e. rabbits		to set back		Not mowed-			
Unit 35	27	Grassland birds		Fallow field	succession	N/A	insufficient staff	Not evaluated		
CIIII 33	- 21	GI BASSIRII G DII GS	Flood greentree	T GILOW HOLD	54000001011	1.071	II Damoio in Cian	1.0.010.00		
			reservoir at least		Place boards in					
1	I I	·	once every 3 - 5		structure December					
					of 2004 and allow to					
	I I		years between						Ongolpg	
	l		December 1 and		fill naturally. Pull		D	D	Ongoing	
			March 15 to mlmic		boards no later than	N.118	Boards removed in	,	beaver/nutria issues	
Unit 37b	596	Greentree Reservoir	natural hydrology	Greentree Reservoir	March 15, 2005	N/A	March.	to dam pipe/bayou	on Stillwater Bayou	
			Provide 104 acres of							
			old field habitat for							
	1		grassland birds and							
			other early							
	1		successional		Mow after August 1					
	1 1		species (i.e. rabbits		to set back		Mowed first week of			
Unit 39	18	Grassland birds	and quail).	Fallow field	succession	N/A	August	Not evaluated		
			Provide 218 acres of				7.00			
	l .		standing crops for							
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	Soybean crop			
Unit 40	104	waterfowl	waterfowl	Agricultural fleld	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
7	i i		Provide 104 acres of							
	1	0	old field habitat for						ł	
		0	grassland birds and							
			other early				1			
	l .		successional		Mow after August 1					
			species (i.e. rabbits		to set back		SE 1/2 mowed first			
Unit 41	13	Grassland birds	and quail)	Fallow field	succession	N/A	week of August	Not evaluated		
Unit Ti		Gradolaria Bijas	No measurable				*			
	l .		objectives		Plant cane rhizomes		1			
	1		developed,		In 4 x 4 grids		1			
			Continue to work		throughout area to		I			
	1		with University of		test the impact of		l			
	1		Memphis to develop		competition on cane					
	1		methods of		plantings. Mow		I			
	1				around existing	), i	1			
	1		promoting the				No additional	I		
		0	establishment and		plantings to differentiate		,,			
11.7.10		Canebrake	expansion of	E-D		SUP	research plots	I.		
Unit 42	13	reestablishment	canebrakes.	Fallow field	plantings.	SUF	planted			
				The last of the second of	Rotate			1		
			k	Thirty-five wood	approximately 1/2 of		1			
	1		No measurable	duck nest boxes	the boxes to face		1			
			100		away from the water					
					to attempt to					
			wood duck nest	replacement and	decrease dump		No action taken			
Throughout	9691	Nesting structures	structures.	relocation.	nesting	N/A	insufficient staff	N/A	J	

restande

Throughout	9691 Invasive Control	No measurable objective developed. Begin removal of	Feral hogs are rapidly increasing in	incorporate	SUP	Baiting/trapping attempted with little success.	Continue baiting and trapping/shooting, particularly during winter months. Encourage hunters to take hogs. Work on developing a special hog hunt for the '06-'07 hunting season.
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Management Unit	Acres	Conservation Target(s) (Habitat/Wildlife)	Habitat Objective	Current Condition	Management Prescription	Supporting Documentation	Habitat Response	Wildlife Response	Unmet Habitat Needs	Strategies to Achieve Unmet Habitat Needs
			Provide 218 acres of							
	1		standing crops for				1			
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	Soybean crop			
Unit 5	117	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
			Provide 218 acres of		Cooperative farming					
			standing crops for		to grow 60 acres of					
		Croplands for wintering	overwintering		sunflowers and 60	Cooperative farming	Soybean crop			
Unit 6	121	waterfowl	waterfowl	Agricultural field	acres of soybeans.	agreement	produced	Not evaluated	N/A	N/A
			Provide 318 acres of							
			moist-soil habitat for				l			
		Wintering waterfowl/dove	overwintering	Dominated by	Cooperative farming	Cooperative farming	L			
Unit 9	23	field for hunting	waterfowl	undesirables	to grow rice.	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 318 acres of							
			moist-soil habitat for				l			
			overwintering	Dominated by	Cooperative farming	Cooperative farming				1
Unit 10	27	Wintering waterfowl	waterfowl	undesirables	to grow rice,	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 318 acres of							
			moist-soil habitat for				1			
			overwintering	Dominated by	Cooperative farming	Cooperative farming	L			
Unit 11	22	Wintering waterfowl	waterlowl	undesirables	to grow rice.	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 318 acres of							
			moist-soil habitat for				1			
			overwintering	Dominated by	Cooperative farming	Cooperative farming				1
Unit 12	14	Wintering waterfowl	waterlowl	undesirables	to grow rice.	agreement	Rice crop produced	Not evaluated	N/A	N/A
			Provide 104 acres of							
			old field habitat for							
			grassland birds and							
			other early							
			successional		Mow after August 1					
			species (i.e. rabbits		to set back		Not mowed-	l .	Not mowed	
Unit 16	37	Grassland birds	and quail).	Fallow field	succession	N/A	insufficient staff	N/A	insufficient staff	Mow or burn in 2006
			Provide 218 acres of				Soybean crop			
			standing crops for				produced. (Now			
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	combined with unit			
Unit 29	25	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	30)	Not evaluated	N/A	N/A
			Provide 218 acres of							
			standing crops for							
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	Soybean crop			
Unit 30	119	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
			Provide 218 acres of							
			standing crops for							II.
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	Soybean crop			
Unit 31	3	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
			Provide 104 acres of							
			old fleld habitat for							
			grassland birds and							
			other early							
			successional		Mow after August 1					
			species (i.e. rabbits		to set back		Not mowed-		Not mowed	
Unit 32	28	Grassiand birds	and quail).	Fallow field	succession	N/A	insufficient staff	Not evaluated	insufficient staff	Mow or burn in 2006

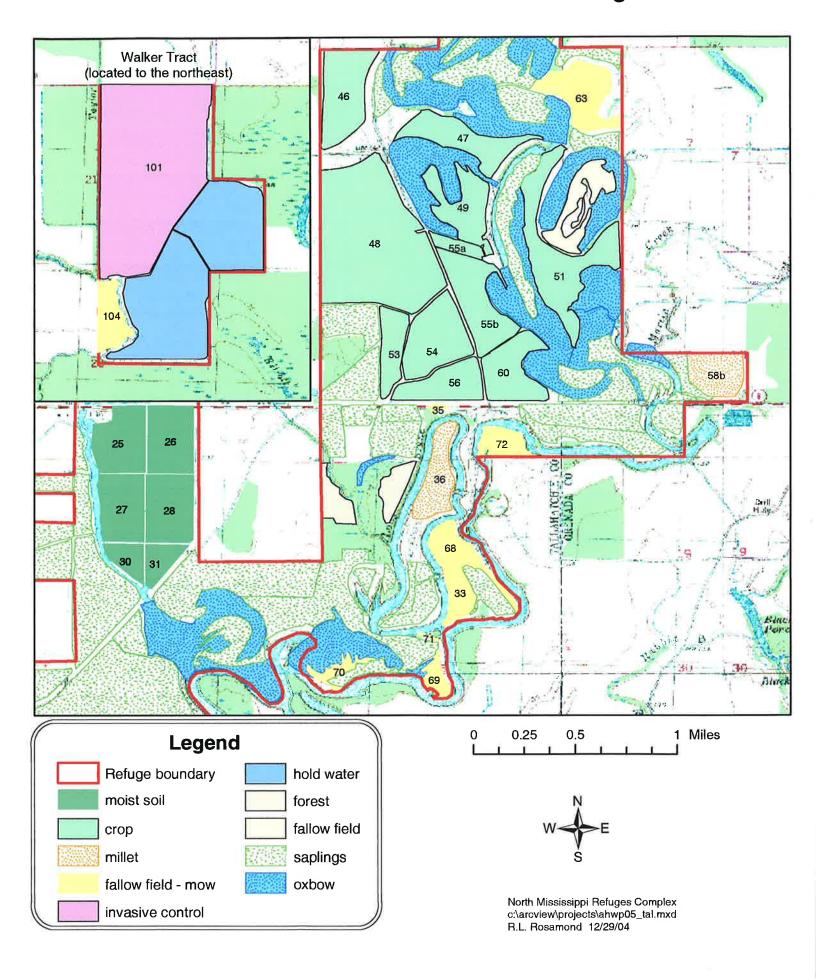
#### Dahomey NWR AHWP - 2005 - Evaluation

			Provide 104 acres of							
	ı		old field habitat for							
	ı		grassland birds and				1			
	l .		other early							
	ı		successional		Mow after August 1					
	l .	l.	species (i.e. rabbits		to set back		Not mowed-		Not mowed	
Unit 35	27	Grassland birds	and quail).	Fallow field	succession	N/A	Insufficient staff	Not evaluated	insufficient staff	Mow or burn in 2006
			Flood greentree							Developed cooperative
			reservoir at least		Place boards in		1			agreement with Wildlife
			once every 3 - 5		structure December					Services for beaver and
	ı		years between		of 2004 and allow to		l			nutria removal, primarily
			December 1 and		fill naturally. Pull		l		Ongoing	for purpose of keeping
1			March 15 to mimic		boards no later than		Boards removed in	Beaver continue to try	beaver/nutrla issues	ditches open. Continue
Unit 37b	596	Greentree Reservoir	natural hydrology	Greentree Reservoir		N/A	March.	to dam pipe/bayou	on Stillwater Bayou	opportunistic shooting.
			Provide 104 acres of							
			old field habitat for							
			grassland birds and							
			other early							
	l .		successional		Mow after August 1					
			species (i.e. rabbits		to set back		Mowed first week of			
Unit 39	18	Grassland birds	and quail).	Fallow field	succession	N/A	August	Not evaluated	None	None
GTIR GO	10	Crassiana bijas	Provide 218 acres of	allow field	Bucoboolon	1300	August	TVOL GVALUATOG	None	140116
			standing crops for							
		Croplands for wintering	overwintering		Cooperative farming	Cooperative farming	Southean eron			
Unit 40	104	waterfowl	waterfowl	Agricultural field	to grow soybeans.	agreement	produced	Not evaluated	N/A	N/A
OTIIC 40	104	Waterrowi	Provide 104 acres of	Agriculturar rield	to grow soybears.	agreement	produced	INDI BVAIDALED	IVA	IN/A
			old field habitat for							
		l'								
			grassland birds and other early							
			successional		Mow after August 1				Notletely	
					to set back		05 4 /0 4 /5 4		Not completely	
Link 44		0	species (i.e. rabbits	E . II	A	h110	SE 1/2 mowed first		mowedinsufficient	
Unit 41	13	Grassland birds	and quail).	Fallow field	succession	N/A	week of August	Not evaluated	staff	Mow or burn in 2006
			No measurable		Di-t		1			
	1		objectives		Plant cane rhizomes		1			
		1)	developed.		in 4 x 4 grids					
		i'	Continue to work		throughout area to					
			with University of		test the impact of					
	i		Memphis to develop		competition on cane		1			
			methods of		plantings, Mow					
			promoting the		around existing					
			establishment and	Ï	plantings to		No additional			
		Canebrake	expansion of		differentiate		research plots			
Unit 42	13	reestablishment	canebrakes.	Fallow field	plantings	SUP	planted.	Not evaluated	N/A	N/A
					Rotate					
				Thirty-five wood	approximately 1/2 of					
			No measurable	duck nest boxes	the boxes to face					
			objective developed.		away from the water	;	l			
			Maintain and monitor		to attempt to				exect.	Hire intern/STEP
			wood duck nest	replacement and	decrease dump		No action taken		Still large degree of	student to maintain
Throughout	9691	Nesting structures	structures.	relocation.	nesting	N/A	Insufficient staff	N/A	dump nesting.	throughout the spring-

#### Dahomey NWR AHWP - 2005 - Evaluation

Throughout	9691 Invasive Control	No measurable objective developed. Begin removal of	Feral hogs are rapidly increasing in number on Dahomey and damaging trails	incorporate	SUP		Baiting/trapping attempted with little success.	Hog population appears to be increase. Habitat destruction more obvious.	Continue baiting and trapping/shooting, particularly during winter months. Encourage hunters to take hogs. Work on developing a special hog hunt for the '08-'07 hunting season.
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# Annual Habitat Work Plan - 2005 Tallahatchie National Wildlife Refuge



Management Unit	Acres	Conservation Target(s) (Habitat/Wildlife)	Habitat Objective	Current Condition	Management Prescription	Supporting Documentation	Habitat Response	Wildlife Response	Unmet Habitat Needs	Strategies to Achieve Unmet Habitat Needs
Unit 25	41	Shorebirds		Farmed in 2004 in soybeans	Draw down in August for shorebirds.	N/A	Let dry naturally. Mowed NE quarter, targeting coffeeweed 7/29. Veg response over entire unit - fall aster (14.7%), smartweed (12.1%) and water primrose (10%)	not evaluated	Need to evaluate vegetation earliermay have missed some moist soll veg production. Units dry too quickly.	Need pumping capability to manage sesbania. Need to drawdown gradually In early spring and keep moist
Unit 26	41	Wintering waterfowl	Provide 852 acres of moist-soil habitat for overwintering waterfowl	Farmed 2003 in milo	Draw down in March. Reflood as needed to control sesbania	N/A	Began drawdown 4/7. Unit dry by 4/21. Fairly heavy cattails in unit, Mowed low 6/14-15. Tried reflooding beginning 6/20- problems with pump. Response was coffeeweed. Mowed northern 1/2 of unit 7/28 (densest coffeeweed). Veg response throughout unit: smartweed - 18.8% cover, coffeeweed - 14.25 cover. Drought in fall so no water until mid-Dec.	not evaluated	Cattalis effectively controlled but need pumping capability to control sesbania. May need to consider willow control, though not a problem yet.	moist
Unit 27		Wintering waterfowl	Provide 852 acres of moist-soil habitat for overwintering waterfowl	Farmed In 2004 in soybeans	Draw down In May/June	N/A	Let dry naturally, Strip mowed (1:4) 8/2. Coffeeweed with understory of millet.	not evaluated	Units dry too quickly	Need pumping capability to manage sesbania. Need to drawdown gradually in early spring and keep moist
Unit 28		Wintering waterfowl	Provide 852 acres of moist-soil habitat for overwintering waterfowl	Farmed in 2003 in mile	Draw down in	N/A	Treated cattails and willows with Habitat 6/14. Not very effective on cattails. Mowed entire unit 7/27-28. Veg responsepoor In terms of moist soil plantsunit too dry.		Units dry too quickly	Need pumping capability to manage sesbania. Need to drawdown gradually in early spring and keep

						owered water level			
	1 1		1			beginning in April			
			1			(was flooding levee).			
	1 1 1	- 1				Did not remove			
	1. 1					boards, just beaver			
	1 1 1			10		debris. Let dry			Need pumping
		1				TEXT COMP			capability to manage
	1 1					naturally, 8/2 -	1		sesbania. Need to
	No. 10	Complex goal of 653				mowed western half			drawdown gradually
	THE ALL ST			Draw down in		(heavy coffeeweed)			
	1	acres of fall		August for	1	and strip mowed			early spring and keep
	1 1				V/A	eastern half	not evaluated	Units dry too quickly	moist
nit 30	14 Shorebirds	2014	soybeans and millet	shorebirds.	V/A	easterman	10.010.000		Need pumping
INC CO.									capability to manage
	E 1						1		sesbania. Need to
		Provide 852 acres of		Draw down in		Began drawdown in			
	1 1			March. Reflood as		April. Mowed sw			drawdown gradually
	I K	moist-soll habitat for	De Verior Controller			quarter (heavy			early spring and keep
			Farmed in 2004 in	needed to control			not evaluated	Units dry too quickly	moist
Init 31	14 Wintering waterfowl	waterfowl	soybeans and millet	sesbania	N/A	cotteeweed) 8/2	not evaluated	Office dry team garage	
TIIL 31	14 WILLIAM HOLDS							1 1 1 1 man of the 000E	
		Provide increased		Cooperative farmer		Not farmed in 2005		Not farmed in 2005	
					Cooperative farming	insufficient staff to	2. U V	insufficient staff to	
		hunting opportunities		to grow out and	Se Train Control of the Control of t	run a dove hunt.	not evaluated	run a dove hunt.	mow or burn in 2006
Init 36	30 Dove hunting	TO HIS POSITO	Fallow fleld	leave entire crop.	agreement	THIT & GOVE THAIR.	110, 07, 111112		
TEME OO		Provide 212 acres of							
	1 1	standing crops for		1					1
	La contra de  la contra del la contra del la contra de la contra del la contra de la contra de la contra del la contra de			Cooperative farming	Cooperative farming		High duck use once		
	Croplands for wintering	over wintering	a company to the		agreement	Corn crop produced	rain water flooded area	N/A	N/A
nit 46	51 waterfowl	1110000110111	Agricultural fields	to grow com.	agroundin				
		Provide 212 acres of							1
	1 1	standing crops for					Vi	1	1
	a de de de unietorina	over wintering		Cooperative farming	Cooperative farming			9910	N/A
	Croplands for wintering	. 6393	Agricultural fields	to grow corn.	agreement	Corn crop produced	not evaluated	N/A	IN/A
Jnit 47	42 waterlowl	waterfowl	Agricultural rielus	to grow dont.					
		Provide 212 acres of		1			L.		A .
		standing crops for				0	High duck use once		1
	Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	Soybean crop		. NI/A	N/A
1202/0020		waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	rain water flooded area	INA	INIA
Jnit 48	183 waterfowl		/ ignount or marke						110
		Provide 212 acres of		3		l .		1	The second second
		standing crops for		1	O		l .	1	1
	Croplands for wintering	over wintering		Cooperative farming			auditated	N/A	N/A
Carrier Cone	39 waterfowl	waterfowl	Agricultural fields	to grow corn.	agreement	Corn crop produced	Not evaluated	IVA	
Unit 49	Selwaterrowi	Provide 212 acres of							M.
								1	
		standing crops for		1	Cooperative forming	Souhean crop		1	TI V
	Croplands for wintering	over wintering	ry - man processes	Cooperative farming	Cooperative tarming	and land	not evaluated	N/A	N/A
Init E1	76 waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	Hor avainaten	1 40.1	
Unit 51	/ CI WALGITOWI	Provide 212 acres of				1			
			1		1		1		
		standing crops for	l .	Cooperative farming	Cooperative farming	Sovbean crop	1		1,000
	Croplands for wintering	over wintering				duod	not evaluated	N/A	N/A
Unit 53	24 waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	TION BY MIGHTON	T	
UTIL 50	E-HIGGSTOWN	Provide 212 acres of							
	1 1		1	L				IV.	1
		standing crops for		Cooperative forming	Cooperative farming	Sovbean crop			1
	Croplands for wintering	over wintering	OF DEPOSE TARGETS			produced	not evaluated	N/A	N/A
Unit 54	50 waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	1,3, 0,4,12,104		
OTHE SH		Provide 212 acres of				1		T.	1
	1 1	standing crops for		1		1	A.		1
			1	Connerative farming	Cooperative farming	Soybean crop			l
	Croplands for wintering	over wintering	La constitución de la constituci		agreement	produced	not evaluated	N/A	N/A
Unit 55	60 waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	Libudood			
- m		Provide 212 acres of	f l			1			
		standing crops for							
				Cooperative farming	Cooperative farmin	g Soybean crop	Mr. a. w. a	Europe.	l
	Croplands for wintering	over wintering waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	not evaluated	N/A	N/A

				Rank vegetation,			Began drawdown			
				millet from last year,			6/15 Millet planted		Need to increase	
	1 1			but mostly			but no rain for about		moist soll/millet	Try burning in 2006.
	1 1		Provide 852 acres of	cocklebur, trumpet			a month. Produced		production in unit	Also, try earlier
	1 1			, ,	Plant millet and		sparse crop. Unit		and reduce	drawdown to see if can
	1 1		overwintering	and other	leave for wintering	Cooperative farming		Little duck response to		get good moist soll
Jnit 58 b	20	Wintering waterfowl	waterfowl	undesirables	waterfowl,	agreement	early Dec. by rain	initial flooding	and cockleburr	response
711K 30 D	- 23	AALITELITIO AASTOLIOAAL	Provide 212 acres of	Undestrables	Wateriowi.	agreement	Barry Dec. by rain	Iriiliai lioodirig	and cockieduri	response.
	1 1		I .							
			standing crops for							
		Croplands for wintering	over wintering		Cooperative farming					
Jnit 60	40	waterfowl	waterfowl	Agricultural fields	to grow soybeans	agreement	produced	not evaluated	N/A	N/A
			Provide 207 acres of							
	1		old field habitat for							
	1 1		grassland birds and							
	1		other early		Mow after August 1					
	1		successional		to set back		Not mowed		Not mowed	
Jnit 63	43	Grassland birds	species.	Fallow field	succession	N/A	insufficient staff	N/A	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N/A
	<del>  "</del>	Grabolaria birac	Provide 207 acres of	T GILDW HOLD	Eddoordion	1477	II Dalliololli Blast	1071	T COMO TR GLOS	1471
			old field habitat for							
	1 1		grassland birds and							
	1		10							
	1		other early		Mow after August 1					
			successional		to set back		Not mowed		Not mowed	
Jnlt 72	15	Grassland birds	species.	Fallow field	succession	N/A	insufficient staff	N/A	Insufficient staff	N/A
	1						Drawdown			
	1						attempted with little			
	1 1						success during	)		
	1		No measurable		Early draw down,		summer, boards left			
	1		objective developed.		Keep dry throughout	1	out through winter in		Revisit in spring '06.	
			Need to control	Open water with	summer, Spray		hopes of freezing		Determine if	
	1 1		Lotus (Nelumbo	extensive area of	lotus aerially if	1	roots and killing		drought/freezing had	If poposesso, touto
Unit 101	272	Invasive control	lutea) in unit	lotus.		PUP	plants	not evaluated		
JUL TOT	2/3	invasive control		iolus.	necessary	PUP	piariis	not evaluated	any impact	aerially spray
	1 1		Provide 207 acres of							
	1		old field habitat for							
	1 1		grassland birds and							
	1 1		other early		Mow after August 1					
			successional		to set back		Not mowed			
Jnit 104	27	Grassland birds	species.	Fallow field	succession	N/A	insufficient staff	N/A	N/A	N/A
							Treated with		Levee work in this	
	1		No measurable	Parrotfeather		,	Aquathol Super K		area may have	
							(granular) with		reduced growth or	
			Need to control	and beginning to			limited success,		caused to spread.	
				spread into			Received money to		Need to evaluate in	Treat impacted areas
Walker Tract ditches	راء ا	Invasive control	Walker Tract		To be determined	PUP		not evaluated	11.37	
valker i raci ditches	9/	Invasive control	VValKer Tract	impoundments	10 pe determined	FUF	retieat in March 06	Hor evaluated	spring	with Aquathol K (liquid).
				l			1			Developed cooperative
				Nutria causing		1	1			agreement with Wildlife
			No measurable	extensive damage to		1				Services for beaver and
			objective developed.	levee system. Seen						nutria removal, primarily
	1 1		Need to control	frequently,	Remove nutria				Still sizeable	for purpose of keeping
	1 1		nutria on Walker	particularly in spring	through trapping and	[		Shot/trapped 17 nutria	population on	ditches open. Continue
Walker Tract	557	Invasive control	tract	and fall	shooting	N/A	not evaluated	on ponds	property.	opportunistic shooting

Tallahatchie NWR AHWP - 2005

Throughout	4199 Nesting structures	A CONTRACTOR OF THE PARTY OF TH		Monitor and maintain existing nest boxes. If time permits, rotate 1/2 of boxes to face away from the water to determine if that will reduce dump nesting.	3	Feb./Mar but not monitored regularly	ducks with variable	Need to monitor	Hire intern/STEP student to maintain throughout the spring.
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# Tallahatchie National Wildlife Refuge Mowing - 2005

Mowed 7/27-8/2



#### Tallahatchle NWR AHWP - 2005 - Evaluation

Management Unit	Acres	Conservation Target(s) (Habitat/Wildlife)	Habitat Objective	Current Condition	Management Prescription	Supporting Documentation	Habitat Response	Wildlife Response	Unmet Habitat Needs	Strategies to Achieve Unmet Habitat Needs
Unit 25	41	Shorebirds	Complex goal of 653 acres of fall shorebird habitat by 2014	Farmed in 2004 in soybeans	Draw down in August for shorebirds.	N/A	Let dry naturally. Mowed NE quarter, targeting coffeeweed 7/29. Veg response over entire unit - fall aster (14.7%), smartweed (12.1%) and water primrose (10%)	not evaluated	Need to evaluate vegetation earlier-may have missed some moist soil veg production. Units dry too quickly.	Need pumping capability to manage sesbania. Need to drawdown gradually in early spring and keep moist
		Minhada u u danfa ul	Provide 852 acres of moist-soil habitat for overwintering		Draw down in March. Reflood as needed to control	NUA	Began drawdown 4/7. Unit dry by 4/21. Fairly heavy cattails in unit. Mowed low 6/14-15. Tried reflooding beginning 6/20- problems with pump. Response was coffeeweed. Mowed northern 1/2 of unit 7/28 (densest coffeeweed). Veg response throughout unit: smartweed - 18.8% cover, coffeeweed - 14.25 cover, Drought in fall so no water until		Cattails effectively controlled but need pumping capability to control sesbania. May need to consider willow control, though not a	
Unit 26 Unit 27		Wintering waterfowl  Wintering waterfowl	waterfowl  Provide 852 acres of moist-soil habitat for overwintering waterfowl	Farmed in 2004 in soybeans	Draw down in	N/A	mid-Dec.  Let dry naturally.  Strip mowed (1:4)  8/2. Coffeeweed with understory of millet.	not evaluated	problem yet.  Units dry too quickly	moist Need pumping capability to manage sesbania. Need to drawdown gradually in early spring and keep moist
Unit 28			Provide 852 acres of molst-soil habitat for overwintering waterfowl	Farmed in 2003 in milo	Draw down in May/June.	N/A	Treated cattails and willows with Habitat 6/14. Not very effective on cattails. Mowed entire unit 7/27-28. Veg responsepoor in terms of moist soil	not evaluated	Units dry too quickly	Need pumping capability to manage sesbania. Need to drawdown gradually in early spring and keep

#### Tallahatchie NWR AHWP - 2005 - Evaluation

							Lowered water level			
							beginning in April			
l .							(was flooding levee).			
1		l .					Did not remove			
		1								
							boards, just beaver			
		1					debris, Let dry			Need pumping
		i e					naturally. 8/2 -			capability to manage
			Complex goal of 653				mowed western half			sesbania, Need to
1			acres of fall		Draw down in		(heavy coffeeweed)			drawdown gradually in
			shorebird habitat by	Farmed in 2004 in	August for		and strip mowed			early spring and keep
Unit 30	14	Shorebirds	2014		shorebirds.	N/A	eastern half	not evaluated	Units dry too quickly	moist
STILL 65		- CHOI GENERAL	2017	CO TO CALLO TALLO	GHOTODH GG.	1.071	Jan Committee	THE STATE OF THE S		Need pumping
							i			capability to manage
		l ·	Provide 852 acres of		Draw down in		Began drawdown in			sesbania, Need to
	1									
			moist-soil habitat for		March, Reflood as		April. Mowed sw			drawdown gradually in
			overwintering	Farmed in 2004 in	needed to control		quarter (heavy			early spring and keep
Unit 31	14	Wintering waterfowl	waterfowl	soybeans and millet	sesbania	N/A	coffeeweed) 8/2	not evaluated	Units dry too quickly	moist
I			Provide increased		Cooperative farmer		Not farmed in 2005		Not farmed in 2005	1
l			hunting opportunities		to grow corn and	Cooperative farming	insufficient staff to		insufficient staff to	
Unit 36	30	Dove hunting	to the public	Fallow field	leave entire crop.	agreement	run a dove hunt.	not evaluated	run a dove hunt.	mow or burn in 2006
			Provide 212 acres of							
			standing crops for				I			
		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	l	High duck use once		1
Unit 46	51	waterfowl	waterfowl	Agricultural fields	to grow corn.	agreement	Corn grop produced	rain water flooded area	N/A	N/A
Offic 40	- 31	WETGILOM	Provide 212 acres of	Agricultural lielus	to grow com.	agreement	Com crop produced	Taill Water Hooded area	IVA	IWA
	1						1			
	1		standing crops for				l			1
		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	to a			
Unit 47	42	waterfowl	waterfowl	Agricultural fields	to grow corn.	agreement	Corn crop produced	not evaluated	N/A	N/A
			Provide 212 acres of	·						
l		l C	standing crops for							1
l		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	Soybean crop	High duck use once		
Unit 48	183	waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	rain water flooded area	N/A	N/A
			Provide 212 acres of							
			standing crops for				l			
		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	l			
11=3-40	1 ~			A				had as sales about	N/A	N/A
Unit 49	39	waterfowl	waterfowl	Agricultural fields	to grow corn.	agreement	Corn crop produced	not evaluated	IN/A	IV/A
			Provide 212 acres of							
	1		standing crops for			2.	l .			
		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	Soybean crop			
Unit 51	76	waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	not evaluated	N/A	N/A
			Provide 212 acres of							
			standing crops for				I			
		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	Sovbean crop			
Unit 53	2/	waterfowl	waterfowl	Agricultural fields	to grow soybeans	agreement	produced	not evaluated	N/A	N/A
51.II. 55	- 24	Transcibili	Provide 212 acres of	riginoutoral naida	to grow doyboars.	agi somone	produced	I I O VALUATOU	14/1	1 342 5
							L			
	1		standing crops for							
		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming			l	Nu.
Unit 54	50	waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	not evaluated	N/A	N/A
			Provide 212 acres of							
			standing crops for				I			
	1	Croplands for wintering	over wintering		Cooperative farming	Cooperative farming	Soybean crop			
Unit 55	60	waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	not evaluated	N/A	N/A
	1		Provide 212 acres of		3	***************************************	*			
			standing crops for				I			
	1	Croplande for wistering	over wintering		Cooperative forming	Cooperative forming	Southann cres			
11-2-50	1	Croplands for wintering		A! 4! -   -!	Cooperative farming	Cooperative farming			N/A	IN L/A
Unit 56	33	waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	not evaluated	N/A	N/A

#### Tallahatchle NWR AHWP - 2005 - Evaluation

Unit 58 b	29	Wintering waterfowl	Provide 852 acres or moist-soil habitat for overwintering waterfowl	creeper, redvine, and other undesirables	Plant millet and leave for wintering waterlowl.	Cooperative farming agreement	Began drawdown 6/15. Millet planted but no rain for abou a month. Produced sparse crop. Unit partially flooded in early Dec. by rain.	t	Need to increase moist soil/millet production in unit and reduce competition by vines and cockleburr	
Unit 60	40	Croplands for wintering waterfowl	Provide 212 acres of standing crops for over wintering waterfowl	Agricultural fields	Cooperative farming to grow soybeans.	Cooperative farming agreement		not evaluated	N/A	response.
Unit 63	43	Grassland birds	Provide 207 acres of old field habitat for grassland birds and other early successional species.  Provide 207 acres of	Fallow field	Mow after August 1 to set back succession	N/A	Not mowed insufficient staff	N/A	Not mowed insufficient staff	N/A
Unit 72	15	Grassland birds	old field habitat for grassland birds and other early successional species.	Fallow field	Mow after August 1 to set back succession	N/A	Not mowed insufficient staff	N/A	Not mowed	N/A
Init 101	273	invasive control	Lotus ( <i>Nelumbo</i> <i>lutea</i> ) in unit	Open water with extensive area of lotus.	Early draw down. Keep dry throughout summer. Spray lotus aerially if necessary		Drawdown attempted with little success during summer, boards left out through winter in hopes of freezing roots and killing plants		Revisit in spring '06. Determine if drought/reezing had any impact.	If necessary, try to
Init 104	27 (	Grassland birds	Provide 207 acres of old field habitat for grassland birds and other early successional species.	Fallow field	Mow after August 1 to set back succession	N/A	Not mowed insufficient staff		N/A	aerially spray.
/alker Tract ditches 7	11		objective developed.  Need to control parrotfeather on the	Parrotfeather colonizing ditches and beginning to spread into impoundments	To be determined	+	Treated with Aquathol Super K (granular) with limited success. Received money to retreat in March '06		Levee work in this area may have reduced growth or caused to spread. Need to evaluate in	N/A  Treat impacted areas with Aquathol K (liquid).
alker Tract	557 lr		No measurable objective developed. It Need to control nutria on Walker	particularly in spring	Remove nutria through trapping and shooting	N/A		Shot/trapped 17 nutria	Still sizeable population on	Developed cooperative agreement with Wildlife Services for beaver and nutria removal, primarily for purpose of keeping ditches open. Continue opportunistic shooting.

#### Tallahatchie NWR AHWP - 2005 - Evaluation

T				Rank vegetation,			Began drawdown			
	- 1			millet from last year,			6/15, Millet planted		Need to increase	
				but mostly			but no rain for about		moist soil/millet	Try burning in 2006.
		U U		cocklebur, trumpet			a month. Produced		production in unit	Also, try earlier
		1.			Plant millet and		sparse crop. Unit		and reduce	drawdown to see if can
1	- 1									get good moist soll
			overwintering		leave for wintering	Cooperative farming				
Jnit 58 b	29	Wintering waterfowl	waterfowl	undestrables	waterfowl.	agreement	early Dec. by rain.	initial flooding	and cockleburr	response
			Provide 212 acres of							
			standing crops for							
		Croplands for wintering	over wintering		Cooperative farming	Cooperative farming				
Jnit 60	40	waterfowl	waterfowl	Agricultural fields	to grow soybeans.	agreement	produced	not evaluated	N/A	N/A
Jill GO		1141411411	Provide 207 acres of			****				l)
			old field habitat for	ľ					1	
			grassland birds and							
	- 1		-		Mow after August 1					
			other early		_		Not mowed		Not mowed	
			successional		to set back			N/A	insufficient staff	N/A
Jnit 63	43	Grassland birds	species.	Fallow field	succession	N/A	Insufficient staff	N/A	Insulicient stall	IV/A
			Provide 207 acres of							
			old field habitat for							
			grassland birds and		7			l		1
			other early		Mow after August 1	l				
			successional		to set back		Not mowed		Not mowed	
		L	The second secon	E-11 61-1-4	succession	N/A	insufficient staff	N/A	insufficient staff	N/A
Jnit 72	15	Grassland birds	species.	Fallow field	SUCCESSION	IVA	Drawdown	1007		
							- · ·			
1							attempted with little			
							success during		1	
		l.	No measurable		Early draw down.		summer, boards left	1		
			objective developed.		Keep dry throughout		out through winter in	1	Revisit in spring '06.	
			Need to control	Open water with	summer. Spray		hopes of freezing	1	Determine if	II
			Lotus (Nelumbo	extensive area of	lotus aerially If		roots and killing	1	drought/freezing had	If necessary, try to
			,	lotus.	necessary	PUP	plants	not evaluated	any impact.	aerially spray.
Unit 101	2/3	Invasive control	lutea) in unit		Hecessary	101	piarito			Paradial Control
		1	Provide 207 acres of				l .			
			old field habitat for							
		l .	grassland birds and						1	1
			other early		Mow after August 1					1
		1	successional	1	to set back		Not mowed		1	2000
Unit 104	27	Grassland birds	species	Fallow fleid	succession	N/A	insufficient staff	N/A	N/A	N/A
0181 104	- 21	an application on the					Treated with		Levee work in this	
		(	No measurable	Parrotfeather			Aquathol Super K		area may have	1
		1					(granular) with		reduced growth or	
1		1	objective developed.		1		limited success.		caused to spread	
		1	Need to control	and beginning to	1	L			Need to evaluate in	Treat impacted areas
		1	parrotfeather on the	spread into	L	I	Received money to	land accelerated	III or	with Aquathol K (liquid)
Walker Tract ditches	?	Invasive control	Walker Tract	impoundments	To be determined	PUP	retreat in March '06	not evaluated	spring.	
							1			Developed cooperative
		1		Nutria causing						agreement with Wildlife
			No measurable	extensive damage to	,		l .			Services for beaver an
			objective developed.	_						nutria removal, primari
					Remove nutria				Still sizeable	for purpose of keeping
			Need to control	frequently,				Shot/trapped 17 nutria		ditches open. Continu
			nutria on Walker		through trapping and		land available of		property	opportunistic shooting.
Walker Tract	557	Invasive control	tract	and fall	shooting	N/A	not evaluated	on ponds	Throparty.	opportunions shooting.

#### Tallahatchle NWR AHWP - 2005 - Evaluation

Throughout	4199 Nesting structures	No measurable objective developed. Maintain and monito wood duck nest structures.		that will reduce		Boxes prepped in Feb./Mar but not monitored regularly due to insufficient	ducks with variable success. Use by screech owls and	Need to monitor	Hire Intern/STEP student to maintain throughout the spring.
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# U.S. Government MEMORANDUM

Date: January 12, 2005

From: Supervisory Wildlife Biologist, Migratory Bird Office, FWS, Jackson, MS

Subject: Comments on 2004 AHWP-Evaluation and 2005 AHWP for Coldwater, Dahomey, and Tallahatchie NWRs

To: Refuge Biologist, North MS Refuge Complex, FWS, Grenada, MS

I have reviewed the subject documents and want to give you a loud "ata girl" for your work. As far as I can tell, both documents meet the intended purpose in providing brief plans for managing the refuges to meet refuge purposes and the use of evaluation and adaptive management to improve habitat and wildlife response to management actions. As you mention, the plans might be a bit ambitious, but what the heck — maybe some cadre of volunteers with tractors, mowers, disks, matches, etc. etc. might show up. If you do not put it down it sure is not going to happen.

I am particularly impressed with your efforts to integrate management activities to address the needs of a variety of grassland and wetland-dependent migratory birds: migrating, wintering, and resident waterfowl; shorebirds; and secretive marsh birds. You will also be providing foraging habitat for wading birds (whether you maintain flooded conditions or have early or late drawdowns) and you might consider making some reference to them in your moist-soil units. The key is to have slow drawdowns if possible to maintain moist-soil conditions, keep nutrients in the units, and concentrate food resources for wading birds.

The following comments are offered to clarify or suggest alternate management strategies and stimulate some additional thought regarding some activities. Several general comments followed by refuge-specific comments:

- 1.) You have a good variety of habitat treatments to meet the many management needs on the refuge. It is critical that you continue keeping records of management actions and responses as a means to continue improving desired habitat conditions with the greatest efficiency.
- 2.) Shorebirds migrate through Mississippi in both spring and fall, with fall habitat conditions generally thought to be the most critical. Fall migration begins in August and extends through October. During this period shorebirds are searching for an invertebrate food base that is available to them in mud flats and shallowly flooded (<6" deep) areas virtually devoid of vegetation. It typically takes 10 to 14 days of flooding before an invertebrate food base can be established on a site. Therefore, if the site is allowed to dry, it will need to be flooded for a minimum of 2 weeks before it will support a food base that is desirable for shorebirds. It is often easier to hold water on the units designated for fall shorebird migration until mid-July to mid-August before initiating a drawdown to make habitat available. But other management scenarios (e.g., early drawdown to smooth pond bottoms, then reflood for shorebirds) may offer a preferred alternative. With relatively high evaporation rates, shallowly flooded sites dry quickly, making reflooding a management option to extend the period of desirable habitat. Shorebirds will forage in and around fairly small pools but respond best if at least 40 to 100 acres are available at any one time. This may require similar concurrent management actions in two or more units in close proximity. Also, because of the tendency for seeds to germinate once a unit is drawndown it is unlikely that one unit will remain desirable habitat throughout the fall migration period regardless of your management efforts. Therefore, you may need to stagger drawdown dates between a number of units to maintain good shorebird habitat through out the 3 month migration period. To get 100 acres of preferred shorebird habitat throughout the fall migration

period may require dedication of 200 acres of ponds with staggered drawdown dates.

- 3.) A minor detail perhaps, but I think you will get the best results from mowing coffeebean (Sesbania) after it begins to flower.
- 4.) Maintenance of desirable grassland habitat may be best accomplished by growing season burns and/or herbicides. I recognize that burning may not be an option; I am just mentioning it. If possible, I would encourage you to stagger years for mowing such that the entire area (i.e., Fields 1, 2, 3, 16, and 17 at Coldwater) is not all burned or mowed in the same year. I also recognize that when you get the mower there you might have to mow it all because it may not show back up for 3 years. Nevertheless, from a management standpoint, it would be best to stagger that management action to provide a diversity of habitat conditions through the years. Evaluation should be conducted in the winter for priority species including Henslow's sparrow, LeConte Sparrow, grasshopper sparrow, sedge wren, northern harrier, and short-eared owl, and early summer for dickcissel, bobwhite (if it does not flood frequently), loggerhead shrike, and field sparrow.
- 5.) Several units were designated for growing sunflowers or millet for dove hunting. No problem there, just be sure that steel shot is required, particularly in areas potentially used by waterfowl. (This may be some regional or national policy.) I would issue a caution regarding using this management practice within large blocks of forest land where such land usemight attract cowbirds. I do not think that is the case in any of the areas that you have designated for this activity.
- 6.) Smooth pond bottoms will facilitate management. Where acceptable, some micro topographic variation will provide shallow ponding and desirable heterogeneity in habitat conditions.
- 7.) In your evaluation, especially at Coldwater, you give an interesting account of waterfowl use relative to area (e.g., 5% of area, 4% of waterfowl use). Be cautious of how you use the information because the habitat use by ducks may change significantly from day to night and from early winter to late winter and warm days to cold days. From late January through March, waterfowl will have an increasing demand for invertebrates to meet changing physiological conditions. Consider beginning early drawdowns, if possible, as early as late January.
- 8.) I wish that I had a solution to address woodpecker predation on wood duck nests. Fortunately, it is not a real common problem across the landscape. But, where it is a problem, it can be devastating. My greatest experience with woodpecker predation was in an old beaver pond where woodpecker habitat was deteriorating, and they predated almost every wood duck nest.
- 9.) Continue with the evaluation of habitat and wildlife responses to habitat objectives and management strategies. Recognize that maintaining early successional habitats requires significant manpower and effort that is in diminishing supply in refuges. At some point you will need to prioritize and recognize that management for some species will need to be forgotten, at least at some sites. What is going on at Dahomey and Tallahatchie? No mowing, no pumping, what does happen there?

#### Coldwater

- 1.) Ponds A, C, H, and S are to be kept flooded and will more likely produce Sagittaria and submerged aquatics than moist-soil plants nothing wrong with that, only a little different than the expressed habitat objective for moist-soil. Also, I realize that this may be part of your moist-soil rotation and you are getting the 190 acres from other ponds this year. A secondary management objective here would be for wading birds and herps.
- 2.) Ponds B, D, F, I, L, and U are to be drawn down early, then reflood for shorebirds. If they are not reflooded soon after the dirt work is completed, they will likely grow up in vegetation that will need to be eliminated mechanically or rot before the shorebirds are likely to use the ponds.

3.) Ponds E, G, J, K, M, N/O, V, and W are scheduled for early drawdown. As suggested above, I would encourage slow drawdown if possible. Once the soil cracks and adequate germination has occurred, I would encourage you to flush the fields with a shallow flood to reduce competition from less desirable plants. Watch for coffeebean and cocklebur and reflood as necessary.

## Dahomey

- 1.) You have an objective of 218 acres of standing crops, is that unharvested or a combination of harvested and unharvested crops? The 218 figure is considerably more than the 84-acre capability of unharvested crops shown in the draft CCP, page 22.
- 2.) In Units 10-12, you have a habitat objective for moist-soil, but a management prescription to cooperatively farm rice. I realize that farming can be part of the rotation for moist-soil and perhaps I am missing something with the snapshot provided in the AHMP.
- 3.) Unit 37b, greentree reservoir, could be flooded more than once every 3 to 5 years as indicated. More important than flood frequency for the health of the trees and the system as a whole is flood duration. Consider no boards 1 year out of 4. In the remaining years vary the number of boards and the duration such that the boards should be installed most years around December 1 and wait for rainfall to begin filling the GTR. If it is stream fed, vary the flood date from December 1 to December 30. Vary drawdown dates from February 15 to May 1 depending of forest type and historic flood frequency. Never pull all boards at once, pull one board a week to extend the drawdown period over the course of a month.
- 4.) Feral hogs directly compete withdeer and will negatively affect management efforts by eating seed, rooting up planted seedlings, and destroying levees. They need to be controlled by whatever means available. Make harvest legal whenever another hunting season is open.

## **Tallahatchie**

- 1.) I do not know a whole lot about Tallahatchie but the moist soil habitat goal of 852 acres seems a little (maybe a lot) overstated if you are counting acres actually managed.
- 2.) Last time I saw the DU unit it looked like decent secretive marsh bird habitat. I doubt that it would make them happy to hear that but I do not even see it designated as a management unit on your map. Am I overlooking something?
- 3.) Do not know what to suggest for getting more ducks to use Fields 25-31. Disturbance may be a factor but you see ducks right up on the road shoulder after the duck season closes. You could try a screen, but I would make sure there is agood food resource there first.
- 4.) As I read the map, it appears that you are holding water on a significant part of the Walker Tract that is not designated as a management unit. What is the deal? Why are we holding water there?

Hope this helps some.

Bob Strader



To Stephen Gard/R4/FWS/DOI

CC

bcc

Subject updates

Steve-

This is an update for the last several months with some of ideas of future projects. Hopefully future updates will be a bit shorter. I've highlighted questions I had for you.

CWR. Drainage at CWR is going well. Of the 10 ponds slated for reworking this year, I've removed all boards from 7 and at last check, we needed some nice sunny weather to allow for evaporation to finish the job. One of the ponds has a beaver dam in the ditch downstream from it which needs to be removed and the remaining 2 have beaver lodges covering the wcs. I've talked to Hal about cleaning those areas, so it's on his list. Of the ponds fixed last year, I've begun slow drawdowns on 6—I'm hoping to reproduce some of the millet growth we had last year. So far, the beavers are not causing the extent of problems they did last year, though the nutria are (unfortunately) enjoying the brush piles the contractors left in the units.

TAL. Began draining msu's behind grain bins. Will we be able to disk, mow, and/or pump as needed to promote desirable plants? We'll need to clean out the big structure before I can do much else

Wood duck boxes. I've prepped all boxes except about 10 at Dahomey, which I hope to get to next week I'm opportunistically banding hens and will try to visit the boxes on the 3 traditional refuges with some regularity, but it's really going to come down to, if I'm near a box doing something else, I'll probably check it while I'm there and band the hen if she's in there. I'm not going to worry about replacing boxes that have fallen down or doing any repairs this year. Once Hal Mitchell comes on board, I may put him to work on some of the repairs, as time permits.

Frog surveys . I dont' know if I told you or not, but I decided to forgo frog surveys this year. I'm still coordinating the state-wide surveys for NAAMP (North American Amphibian Monitoring Program), but not running any routes myself. I'm going to revisit it next year. However, though we didn't get any funding for the malformed frog surveys, we were asked to participate in a follow up study. Basically, I'm going to be collecting tadpoles and ship some live, some preserved to a couple folks to look for developmental problems at the tadpole level. The folks doing the study provided all the materials, so we just have to provide the time.

Burning. I really appreciate being able to go to Noxubee this week to help with the burn. They were really appreciative and I learned a lot. I would like to eventually burn here and I'm going to work on getting Dusty to agree to assist us (I'm keeping my fingers crossed.) I'm going to work on getting burn plans together on anything we might want to burn in 2006 and submitting them this winter. Then, when the opportunity arises, we'll be able to do it. In addition to fallow fields on all three refuges, I'm thinking about the brush piles at CWR (I don't know what we'd have to file for those) and possibly the buffer strip between Christmas Lake Road and Christmas Branch at Dahomey. I'd like to see that as a cane brake and, if we can do it, fire should be the way to encourage that The U of Memphis folks would be interested in looking at the before and after on that, if we did it. Any thoughts?

**Bird surveys**. In addition to planning to go to the id workshop, I've also got contact information for several birders from Jandro. I'm hoping to meet with them next week sometime and we can move forward on the point counts at Dahomey.

Interns. Hal Mitchell is very excited about the whole STEP position. He's supposed to give me his paperwork within the next week or so, so we can put together a package to send to personnel. He said his parents were fine with him staying here. I'm planning on calling them this weekend, just to make sure

author Survey

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they understand the situation and are ok with it. I'll also put together a form for them to sign saying that they understand he will be unsupervised during his off time. Are there any issues I need to know about regarding him operating equipment/vehicles? (He will be 18 this month.) I spoke with Hal and he agreed to check him out on tractors with implements when he comes on board. I saw the info you forwarded to me regarding another potential intern. I thought I'd call him and find out his interest—my impression is he wants to work at Cahaba NWR, so I don't know how flexible he is. However, in talking to David Viker, I found out we could recruit STEP students like I have recruited interns in the past. If we have the money, I'd like to rerun the intern advertisement, but actually offer real money, instead of just a stipenc. Any problems?

Invasives. I treated the parrotfeather at Walker with endothal with little effect. (I need to give you the PUP to sign—it can be approved at the station level.) David Richardson at Noxubee suggested using Habitat on it. Once the PUP's come through, I'd like to go ahead and try it. The recent excavator work out there has spread a few patches out, so I'm now seeing more inside the levee. I'm concerned about the rate of spread, and would really like to combat it now, rather than in5 years when it's covering the entire pond. I'd still like to try hog trapping/shooting at Dahomey this summer if I'm able. I have plans for a "repeater" trap which has been fairly successful at Lower Suwanee so I may be talking to you about constructing a couple later in the year. I'm still shooting nutria when I get a chance, but not spending too much time on it—just when the opportunity presents itself.

Research. As I mentioned, Ed Keiser would like to continue working on the Smith, Whaley, and Starr Properties on his own time, once he finishes with the contract. I may mention the Fooshee properties as well, since they aren't much further than Whaley and see if he wants to check them out on his own time He'll return the equipment he has from us once the contract is completed. Once his special use permit expires (9-30-05), I'll go ahead and reissue it, with the same conditions (i.e. allowed to carry a handgun with rat shot, allowed to collect a limited number of speciments, has to submit regular updates, etc.). Also, he's sending us the original unbound report for the Starr properties and I'll take it to Zip Print or somewhere local to get copies made.

The U of Memphis folks (Scott Franklin) asked us to treat that experimental plot again--apparently we were not effective in girdling the trees. (It's apparently harder than I realized.) In any case, I'm going to go out there and try again, using Garlon this time. (Is it ok for me to order some? It's also on the manager's approval list.)

**Miscellaneous**. Myself and several other staff need 4-wheeler training (Noxubee wouldn't let Philip or me run the 4-wheelers on the fire). Hal's checking into that.

#### Upcoming travel

May 2 - 5 - bird id workshop, Vicksburg

May 27 - dragonfly workshop, Yazoo City

May 31 - June 3 - intermediate fire behavior, Russellville, AR

Aug - 2 - 5 - MOCC training, Catahoula NWR, LA

Well, that's what I've been working on. I apologize for the length, but it should be shorter next time.

Becky Rosamond Wildlife Biologist

North Mississippi Refuges Complex U.S. Fish and Wildlife Service 2776 Sunset Drive