Agenda Item 10

From: Winkler, John

Sent: Thursday, December 09, 2010 11:18 AM **To:** Scott Japp [mailto:sjapp@huntel.net]

Subject: John - Mowing policy

Director Japp:

I will place the agenda item you requested on the January subcommittee and Board agendas.

The NRD has had a policy for many years to not mow dam sites and levees, except immediately along trails (due to trail use need) until after the spring nesting and birth season for birds and animals (pheasants, turkeys, migratory birds, deer, etc.) is complete and the birds/animals and young can safely move out the way of mowing equipment. It is generally accepted that the nesting/birth period is complete by the end of June. The only exception to that rule is where we have a newly built dam or levee and we need to mow the weeds prior to seed formation in late June. The levees/channels are mowed from July 1 to October 30 (or later) and this usually means one mowing in rural areas and two mowing in urban areas. We start mowing in urban areas due to trail use. The Corps and NRD staff inspect levees/dams in late summer/early fall, so we need to mow them before the inspection, otherwise the inspections are difficult. The dams are mowed after the levees/channel s are mowed, so often mowing occurs in late fall. We mow high hazard dams yearly (e.g. Site 6) and low hazard dams (e.g. W-20) on a 5 year rotation, unless we have weed or tree issues. Dams are inspected in late fall by O/M staff and on a 5 year cycle in spring by engineering staff/NRCS staff (for low hazard dams; high hazard dams are done yearly by engineering staff), so a fall mowing works well for spring inspections and late fall inspections. It is difficult to see cracks, rodent holes, etc. on dam surface with 3 ft. tall grass cover, during inspections. In addition, mowing removes trees and other unwanted vegetation which may cause safety issues with the dams.

One of the District's missions is creating habitat, however, the District also has a greater responsibility to protect lives and property and to guarantee that our dams and other structures are safe. Dam Safety should not be compromised and in fact mowing of these structures is the first line of defense in finding problem areas on the structure. The District must be responsible and not shirk its duty to protect the people of not only Washington County but the people of the entire District as a whole.

Thank you.

Regards,

John Winkler

From: Scott Japp [mailto:sjapp@huntel.net] **Sent:** Thursday, December 09, 2010 9:38 AM

To: Winkler, John

Subject: John - Mowing policy

John

Put on next month's agenda regarding the mowing of NRD property. We may need to add it to our policy manual. Apparently common since is not being used. I was contacted by residents in my area that the NRD was mowing dams site area this week and destroying the winter habitat for the wildlife and their hunting areas.

A little was is going on here. I saw a NRD employee at New Port landing mowing the damsite the first of Nov. He stated to me they were going to go mow dam sites in Washington Co. I contacted the residents of Washington Co, if they wanted there dam sites mowed. They stated no, do to the lateness of the year for the lack of regrowth for the wildlife habitat for the winter. I contacted Ron L and stated to him that the residents of Washington Co, do not want their damsite mowed this time of the year.

Apparently common since did not prevail since our staff was mowing in Washington Co. I thought one of our missions it wildlife habitat? Explain to me why are we destroying the winter cover of the wildlife and hindering people hunting areas? If weeds on the site were and issue then they should have been address earlier in the growing season preferably in the summer.

A proper dam inspecting can still be accomplish without destroying the vegetation on the site.

Scott Japp

Memorandum

To:

Marlin Petermann

Ron Lehman Jason Schnell Terry Keller Chuck Leinen

Mitch Keebler Dennis Piper Dennis Cady

Neil Jensen

From:

Martin P. Cleveland

Date:

April 15, 2010

Re:

Grade Stabilization Structure Inspections

Attached is an updated inspection schedule for the "partial yearly inspections" that are completed in the Spring period by NRCS (Mitch Keebler) and NRD staff (Ron Lehman and Martin Cleveland). The attached schedule allows for at least twenty percent (inspect each structure at least once every 5 years) of all existing structures to be inspected yearly by NRCS and NRD staff. The only exception to this rule is the high hazard structures (T-M 22-A and 5-A) and "major problem" structures that need to be inspected yearly by the before-mentioned inspection team.

All structures need to be inspected yearly, in the fall period by District Medium Equipment Operators (Terry Keller, Jason Schnell) or Walthill staff (Dennis Piper and Dennis Cady). The medium equipment operators will inspect all structures, except the Tekamah-Mud and Silver Creek structures, which will be inspected by the Walthill staff.

Attachment

18310 MC;pb File: 502

PROPOSED PARTIAL INSPECTION (SPRING ONLY)

Watershed	Structure	200	6 200	7 200	8 200	9 2010	201	1 2012	2013	3 201
Papillion	D-3	X					X		1	
Creek	D-4	X	7				X	 	 	
(small dams)	D-15B				Х	1	 	 	1	X
	D-17			X			 	1	 x	 ^``
	D-18		 	Х			1	 	│ X	┪
D=Douglas County	D-20		X		1			X	 ^`	╅
	D-38			T .		X		 -`` -	 -	
S=Sarpy County	D-45					X	i	1		
	D-76		Х	1			<u> </u>	X	 	
W=Washington Cty	D-76A		Х			1		X		
	S-4				1	X		 		
	S-6					X		 		
	S-21				Х	 		 		Y
	S-27	Х			1	1	X	X	X	X
	S-31	X		-		1	X	$\frac{x}{x}$	X	X
	S-32	X	1	1			X	X	X	X
	S-35			X				 	$\frac{x}{x}$	
	W-2		X	 				Х		
	W-3			1	Х			X	Х	Х
	W-4		Х					X	^	
	W-6			X					X	
ļ.	W-15				X					Х
	W-16				X					X
	W-16A				X					$\frac{\hat{\mathbf{x}}}{\mathbf{x}}$
	W-20A				X					$\hat{\mathbf{x}}$
Ī	W-26			Х					Х	-^ -
	W-42			X					$\hat{\mathbf{x}}$	
Watershed	Structure	2006	2007	2008	2009	2010	2011	2012	2013	2014
Tekamah	3-1		Ī	Х					X	
Mud Creek	3-7			X					$\frac{x}{x}$	
	4-1		X					X	^ +	
(Burt County)	4-2			~ 		X		-^-		
Tekamah Mud Creek (Burt County)	4-5					X				
	5-A	X	Х	Х	X	X	\mathbf{x}	x	\mathbf{x}	\mathbf{x}^{\dagger}
	6-1	1	X			~	^	$\frac{x}{x}$	^ +	^
	6-2				Х	-		^		X
	7-5			Х	~				$\frac{1}{x}$	
	9-A	1 1			\overline{x}^{+}	 	 -		^ - -	X
	9-5	x	$\neg \vdash$		^		$\frac{1}{x}$		_	^
	22-A	X	Х	Х	X	x	$\frac{2}{x}$	\mathbf{x}	$\frac{1}{x}$	X
	41-A	X					$\frac{\hat{x}}{x}$	^ -	<u>^</u> -	^
	42-A	X	—— <u> </u>		 -		$\frac{2}{x}$	_		

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	Proposed Partia											
Watershed	Structure	20	06 20	07	2008	3 200	09 20	10 :	2011	20	12 20	13 201
Turtle Creek	1			$\neg \tau$	V	<u> </u>	7				T T	
(Sarpy County)	2	Х							Х	1		_
Watershed	Structure	200	06 20	07	2008	3 200	9 20	10 :	2011	201	2 20	13 201
Buffalo	DS-5		T	i			X					
Creek	DS-20		1	7		X		╁		┨──	_	Tx -
	DS-24				•		\top			╁┈	_	
(Sarpy County)	GS-7					X		+		1		Х
	GS-10		>	(1	┪	_		X	_	- ^ -
	GS-14		X			1				X		
	GS-16	X							X		_	
	GS-17A				Х							
	GS-19	Х							X			
	GS-22	X						\neg	X	 		
Watershed	Structure	200	6 200	7 2	2008	200	9 201	0 2	011	201	2 201	3 2014
Silver Creek	1				Х	<u> </u>					X	
	2						X	╗			T	
(Burt County)	3						Х					
	14			$oldsymbol{\mathbb{I}}$			Х				1	X
	15					Х						
	16	X							X			
	17		X							Х		
	18				X						X	7
	19						X					
	32	X							X			
	33	Х							X			
	34	X		_					X			
	6		X							Х		
	23	ļ	X	_ _			ļ			Χ		
	24	<u> </u>	X			,	ļ			Х		
	25	-	X	-	.			_		Χ	ļ.,	<u> </u>
	31	 	X	-			ļ		_	Χ	ļ	
Watershed				_			<u> </u>		_	Χ	ļ	
Chalco Hills	Structure		2007							2012	2013	2014
Sarpy County)	21 SD	X	X		X	X	X	>	듸	<u> X</u>	X	X
								<u> </u>				
Watershed	Structure	2006	2007	20	08 2		2010	20	11 2	2012	2013	2014
lanson Lake Dam	1 (Sediment)	ļ ·	<u> </u>			Χ	Х	X		X	X	X
Sarpy County)			<u> </u>	<u>L</u>								
Watershed	Structure	2006	2007	20	08 2	2009	2010	20	11 2	012	2013	2014
almer Dam	1	Х	Х		(Х	X	X		X	Х	Х
Douglas County)									7			
Watershed	Structure	2006	2007	20	08 2	2009	2010	20'	1 2	012	2013	2014
igeon-Jones	3	Х	Х	X		X	Х	X		Х	Х	Х
Dakota County)	4					X			1			X
	5				_	X		<u> </u>	- -			X
	14				十		Х		+			
Watershed	Structure	2006	2007	200	08 2	009		201	1 2	012	2013	2014
Papillion Creek	Midland Lake	1		<u> </u>	- -	X	X	X		X	Х	X
Medium size dams)	Shadow Lake				\dashv	$\frac{x}{x}$	$\frac{\hat{x}}{x}$	X		$\frac{\hat{x}}{x}$	X	$\frac{\lambda}{X}$
	13			X		$\frac{x}{x}$	$\frac{x}{x}$	X		$\frac{\lambda}{X}$	$\frac{\hat{x}}{x}$	$\frac{\hat{x}}{x}$
Candlewood	17	X	Х	X		$\frac{\hat{x}}{x}$	$\hat{\mathbf{x}}$	$\frac{\lambda}{x}$		$\hat{\mathbf{x}}$	$\frac{\hat{x}}{\hat{x}}$	$\hat{\mathbf{x}}$
Newport Landing	6	X	X	X	_	\hat{x}	$\frac{\hat{x}}{x}$	$\frac{x}{x}$		X	$\hat{\mathbf{x}}$	$\frac{\hat{x}}{x}$
Sediment	6 SD	X	X	$\frac{1}{X}$	_	$\frac{x}{x}$	X	$\frac{\alpha}{x}$		X	$\hat{\mathbf{x}}$	$\frac{\hat{x}}{x}$
alnut Creek	21	X	X	$\frac{\dot{x}}{x}$		X	$\frac{x}{x}$	$\frac{\lambda}{x}$		x	$\frac{\hat{x}}{x}$	$\frac{\hat{x}}{x}$
hitehawk	18 SD	X	$\overline{\mathbf{x}}$	X		X	$\hat{\mathbf{x}}$	$\frac{\hat{x}}{x}$		$\hat{\mathbf{x}}$	$\frac{x}{x}$	$\frac{\hat{x}}{x}$
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18410 Proposed Partial Spring Inspection

MEMORANDUM

TO:

Programs, Projects and Operations Subcommittee

FROM:

Martin P. Cleveland

SUBJECT:

Levee/Channel Projects and Grade Stabilization (Dam) Structure Mowing

Frequency

DATE:

January 4, 2010

In response to emails from Director Scott Japp to General Manager John Winkler in December 2010, this memo outlines the District's current mowing frequency for levee/channel projects and grade stabilization structures, as follows. (It should be noted that none of these flood control or grade stabilization projects were built for the purpose of providing wildlife habitat. They certainly do provide wildlife havens and access corridors at times, but were never intended to be managed as such. Operation and maintenance procedures for these projects are defined by Management and Technical staff with the safety of the public being the foremost consideration.)

A. Levees/channels:

The District operates and maintains levees/channels in Sarpy, Douglas, Dodge and Dakota Counties. The levees and channel projects are normally mowed once a year in early summer to maximize flood capacity and monitor their condition, starting after the bird nesting and wildlife birth season is completed, so that wildlife is able to avoid the mowing equipment in the area, usually starting after July 15. Some project areas, in particular urban areas with higher flood damage potential and recreational trail use, are mowed earlier and more often, such as twice a year, beginning in late May - early June. New projects are mowed several times per year to reduce weed problems. The mowing of projects (Union Dike, Western Sarpy Levee, R-613 Levee, R-616 Levee, Big Papio Creek and tributaries Levees, Little Papio Creek, Pigeon Creek Levees) is usually completed by November, prior to the first snow fall. District staff and equipment mow what is possible via tractors and flexible wing mowers. Some areas (e.g. from berm edge into creek) are too steep to mow, so herbicides are used to eliminate woody vegetation. City Park staff and equipment mow a narrow strip (e.g. 6 ft. wide) along trail edges more frequently than once a year and start as early as May.

The levees, channel areas and dams for that matter are mowed to curb weed growth and volunteer trees and to permit late summer and fall project inspections by the Corps of Engineers and District engineering staff. Inspections are done to detect cracks, rodent holes, settlement areas, erosion area and facility defects (e.g. drainage structures), but every time a project is mowed it is one more inspection by District personnel to help assure the facility is sound and is good condition.

B. Grade Stabilization Structures (e.g. Dams): The Grade Stabilization Structures mowing frequency is as follows:

1. High Hazard Class Dams: Yearly

The high hazard dams are Papio Creek Sites S-27, S-31, S-32; Shadow Lake; Midland Lake; Sachs-Palmer Dam; Papio Site 13 (Elk Ridge); Papio Site 6 (Newport Landing and Prairie View); Papio Site 21 (Walnut Creek); Papio Site 17 (Candlewood Lake); Papio Creek Site W-3; Tekamah Mud 5-A (Summit Lake); and 22A (North Ridge); Pigeon Jones 3 (Hubbard Dam); Hanson Lake Dam; Zorinsky Lake Basin 3 (White Hawk). The District operates and maintains dams in Sarpy, Douglas, Washington, Burt and Dakota Counties.

These high hazard class dams, by Nebraska Department of Natural Resources (DNR) definition have a greater potential for breach related impacts to human life and property then low hazard class dams and the yearly mowing allows for detailed inspection of the embankment and increase the chance that problems may be discovered and therefore corrected. These dams are inspected yearly by District engineering and DNR staff. Some of these dams (e.g. Candlewood and White Hawk) are mowed more frequently by local parks departments.

2. Low Hazard Class Dams: Five Year Frequency (once every 5 years).

The District low hazard dams are inspected yearly by maintenance staff and periodically (5 year cycle) by District engineering and sometimes NRCS staff as well in Spring months (April, May). The DNR staff inspects these dams every 2 or 3 years.

The dams are to be mowed prior (within one year) of the periodic inspection. See attached memo related to inspections that guides staff on mowing sequence.

Some of the dams require more frequent mowing than 5 year cycle due to weed or volunteer tree problems. In addition, dams in the Urban areas are mowed sometimes more often than once per 5 years, depending upon the extent of public use of the area around the dam.

If time allows in the fall, the dams in the metro Omaha area (Sarpy, Douglas, Washington Counties) are mowed annually in order to facilitate an inspection by District maintenance personnel while mowing. These structures are located in, or impact, the highly populated part of the District where dam safety concerns are heightened.

Enclosure

File: 529mowing(2)