

Sep 3, 2025

Subject: Livestock Water Tank Application - Yoast Pond 011

Dear Miranda

Our office is in receipt of an application for a Livestock Water Tank (LWT) for the subject dam.

The impoundment is located: on an unnamed tributary of Grassy Creek

Status of dam construction: has been constructed

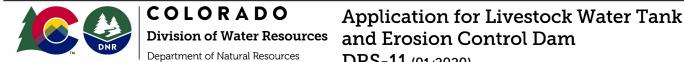
Livestock water tanks include all reservoirs created by dams constructed after April 17, 1941, on watercourses, the channels of which are normally dry as determined by the state engineer, having a capacity not exceeding ten acre feet and a vertical height not exceeding fifteen feet from the bottom of the channel to the bottom of the spillway to be used for stock watering purposes. (Section 35-49-103(1) C.R.S.) Only natural runoff on a normally dry water course can be stored in a livestock water tank. No water from any well, spring, live stream, or ditch can be used to fill the tank. Water in the tank may only be used for livestock watering purposes with no additional uses allowed.

Where, in the judgment of the state engineer, tanks upon any stream and its tributaries do not require conduits for purposes of safety or the protection of prior livestock water tank rights, it is lawful for the state engineer to approve an application not calling for conduits. Nothing in this section shall abrogate the right of any owner of a vested water right or appropriation of water to require such conduits in any case where necessary to protect such senior right. (Section 35-49-111 C.R.S.)



Based on the review of the subject application, the status of the dam's low level outlet: The dam has not been constructed with a low-level outlet
Status of the spillway: Existing
Spillway size in feet: 9
The recommended spillway size in feet based in the drainage area is: 8
Spillway size in relation to the drainage area upstream of the dam: is/will be proper for that recommended for the drainage area upstream of the dam
A copy of the signed LWT application is attached. An electronic copy will be maintained with the Division of Water Resources.
The application has been: Approved
Finally, please be aware of any other permitting or regulatory requirements associated with the construction of a water impoundment structure, including but not limited to county and/or municipal regulations, and wetland permitting through the U.S. Army Corps of Engineers (see www.usace.army.mil for regional contact information).
Sincerely
Erin Light

Division Engineer



DRS-11 (01/2020)

#### **Application Instructions**

#### For Livestock Water Tank Applications:

This application is required per Section 35-49-106, C.R.S. and must be submitted electronically to the State Engineer's Office Online Form Submission Email account <a href="mailto:DWRPermitsOnline@state.co.us">DWRPermitsOnline@state.co.us</a> a minimum of 45 days prior to construction. A filing fee of \$15.00 is required for Livestock Water Tanks unless the dam vertical height does not exceed 5 feet and the structure impounds less than 2 acre feet of water. After submitting this form to

DWRPermitsOnline@state.co.us, you'll be provided with the payment options.

For Official Use Only								
Receipt/Priority Number:	19131		WDID:	5715000				
Payment Referer	nce Number:	47766						
Date Received:	9/16/2024 Date Approved: 09/03/2025							
Approver's Signature: Cin C. H. Light								
Approver's Name	Erin Ligh	t		Approved				

Livestock Water Tanks are regulated and subject to the authority of the State Engineer consistent with sections 35-49-101 through, 116, C.R.S.

#### For Erosion Control Dam Applications:

This application is required per Section 37-87-122, C.R.S. and must be submitted electronically to the State Engineer's Office Online Form Submission Email account <a href="mailto:DWRPermitsOnline@state.co.us">DWRPermitsOnline@state.co.us</a> a minimum of 45 days prior to construction. A filing fee of \$15.00 is required for Erosion Control Dam and after submitting this form to DWRPermitsOnline@state.co.us, you'll be provided with the payment options.

Erosion Control Dams are regulated and subject to the authority of the State Engineer consistent with section 37-87-122, C.R.S.

#### Additional Information:

Additional information, including beginners guides to Livestock Water Tanks and Erosion Control Dams, is available at www.colorado.gov/water

	WWW.cotorudo.gov/ water								
1.	Application Type								
(	Livestock Water Tank								
	Will the structure be used for livestock watering use and no other use? Yes No								
(	Erosion Control Dam								
	Will the structure be used to control ero stored or detained behind the dam?	osion with n	o use of	the water OY	es No				
2.	Responsible Parties								
	First Name	Middle Ini	tial	Last Name		Suffix			
	Miranda	L		Kawcak					
	Name of Company (if applicable)	Či.		Å.					
	Peabody								
	Phone Number	Email Add	ress						
	970 870 2718	mkawca	ak@pe	abodyenergy.co	om				
	Mailing Address		City		State	Zip Code			
	29515 RCR 27		Oak Cr	eek	CO	80467			



3. (	Contr	actor Info	rma	ation										
	First	Name				^	Middle Initi	al	Last	Name				Suffix
	Name	of Company	,											
	Phone	e Number				Е	Email Addre	ess						
	Mailir	ng Address					Cit					State		Zip Code
4. ١	∟ Name	of Dam												
	Yoas	st Pond 011	1											
5. [	Dam I	Location												
	To de	termine the						Locat	ion S <sub>l</sub>	otter a	ıt:			
		://dwr.state. r Division	.co.L	<u>ıs/Tools/</u>	<u>Location</u>	Conv	<u>verter</u>		١.	Vater D	istrict			
		sion 6 (Stea	amb	voat / Va	mna/M	/hi+	o Drainac	·o)	ΠГ			mpa Riv	or	
		51011 6 (316	allic	)0at/ 1a	iiipa/ w	/11110	Plailiag	(e)		) / - IVII	uule ta	пра кіч	ei 	
	PLSS	04/0	•	• •		_	a a la Ca			D			Du	Country
	Q40	Q160	٦Г	ection			nship		١.	Range		Ο VA/	PM	County
	NE	SW		.6		5.0			)5	87		•W	S	Routt
		Location												
		oint taken sho atum should l				the	dam above	the	strea	nline/o	utlet			
	Zone			Easting			Northin	g (UT	My)					
	Zon	e 13		31716			44730	51.7						
6 7	∟ Tank	Dimension	) S											
0. 1		Vertical		.1 (6.)			# I.I. (6.)			Upstre	am		Dowr	nstream
		Height (ft)¹	Ler	ngth (ft)	_	W	/idth (ft)	7			ontal:1	Vertical)	(Hori	zontal : 1 Vertical)
Dam	: [	15'	30	0'	Cres	t: 1	.2'	Sl	opes:	3:1			2.8:	1
	condu		is low											invert of the outlet st of the emergency
7. F	Reser	•												
		m Name or W	/ater	Source										
	The	Water Course	e mu:	st be dry	80% of t	he ti	ime to qual	ify.						
		ce Area (acre			y (acre-f				a (acr	es)1				
	0.47			3.17										
	<sup>1</sup> If th	e drainage are	a is u	nknown, l	eave blan	k and	d a spillway :	size w	ill be a	ussigned				

3. Emergency Spillw	vay (See Table 1, Spillw	vay Sizing Guideline	s)	
Bottom Width (ft)	Side Slopes: (Horizontal : 1 Vertical)	Freeboard (ft) <sup>1</sup>	Location relative to downstream)	o embankment (facing
15'	3:1	4.5	Left Right	No Spillway
1 Freeboard means the minimum is 3 feet.	vertical dimension between the c	rest (or invert) of the emerge	ncy spillway and the cre	st of the dam, the
9. Outlet Conduit				
	ugated Metal Pipe			
Diameter (inches)	agatea metatripe			
12"	7			
For Livestock Water	」 r Tanks			
Can all water be	e drained through a gated or (	ungated outlet? Yes	No	
For Erosion Control				
	rained through an ungated ou	tlet leaving no more than	2 acre-feet in storage	? OYes No
	rames cinsus; an angaces ou	tiet teaving no more than	- dere reet in storage	
10. Dam Status				
Proposed		00		
Existing <sup>1</sup> If existing	ng, when was construction co	mpleted?   10/1997		
<sup>1</sup> These dams may be Engineer.	subject to modification, alter	ration, repair, or breach co	onsistent with the aut	nority of the State
I1. Sign and Enter N	lame of Responsible In	dividual or Authoriz	ed Agent	
<ul> <li>application. Dam</li> <li>an alternative to</li> <li>and standards, it</li> <li>The making of fal</li> <li>misdemeanor pun</li> </ul>	t reasonably comply with the designs completed by a Profethe standards. If the State Engis the duty of the owner to make statements herein constitusuant to C.R.S. 24-4-104 (13) (re true to my knowledge.	ssional Engineer and subm gineer finds that the const ake changes the State Eng tes perjury in the second	itted with the applica truction fails to confor ineer determines are degree, which is punis	tion may be accepted as m with the application necessary. hable as a class 1
Sign or Enter Name(s	) of Responsible Individual(s) (	or Authorized Agent		Date
Miranda	Kawcak			9/16/2024
If Signing Enter Name	and Title			
Miranda Kawcak,	, Environmental Manage	r		



# State Engineer Standard Plans and Specifications for Construction of Livestock Water Tank and Erosion Control Dams

#### • Site Selection

- Foundation soils should be firm to provide adequate support for the embankment and should have low permeability to allow for water retention. Site selection should consider potential downstream property damage in the event of a dam failure. Construction of dams in boggy areas, areas with non-uniform fractured rock, or sands/gravels is not recommended and an engineer should be hired to evaluate the site conditions. Any part of the reservoir basin excavated below grade cannot expose groundwater.

#### Embankment Design

- Backfill material to be used for construction of the cutoff trench and embankment should be a suitable clay material and contain no material larger than 6 inches in diameter.
- The upstream slope should be constructed with a slope no steeper than 3:1, and the downstream slope should be no steeper than 2:1 (see cross section below). The dam crest should have a minimum width of 10 feet and the surface should be graded with positive drainage toward the reservoir basin.
- It is recommended that rock rip rap or other suitable material be placed on the upstream slope of the embankment to protect it from wave action. A suitable gravel or geosynthetic material should be placed under the rip rap to prevent fine material from washing out from behind the larger rock.
- The embankment should be fenced to restrict livestock from accessing the dam since they damage the protective vegetation and increase erosion.

#### Embankment Construction

- The topsoil and all organic material should be removed from the foundation of the proposed dam site. Organic soil should only be reused for placement on the completed embankment to promote the re-growth of vegetation.
- A cutoff trench should be excavated under the full length of the centerline of the dam with sloping sides (1:1 min.), a minimum bottom width of 3 feet and a depth of 3 feet.
- The foundation of the dam should be scarified/ripped to a depth of 6-inches to provide proper contact between the native foundation and embankment. This surface should then be moisture treated before placement of fill.
- Fill material should be placed in layers not exceeding 12 inches in thickness prior to compaction. Suitable backfill material should have enough clay and moisture content to roll a small ball by hand. If this cannot be done, the soil is likely too dry or does not have adequate clay content.
- Each lift should be thoroughly compacted using a sheeps foot compactor. Care should be taken not to allow the top layers of the soil to dry out between placement of lifts.
- Fill should be placed in uniform lifts that cover the entire embankment length and width.

#### Outlet

- A minimum diameter of 12 inches is recommended and should be protected at the upstream end by a trash rack.

#### Emergency Spillway

- The spillway should have sufficient width to provide capacity to route the runoff from the drainage basin above the dam during rainfall/runoff events.
- A minimum of 3 feet of freeboard is required from the bottom of the emergency spillway to the top of the dam.

#### • Example Plan View and Cross Section

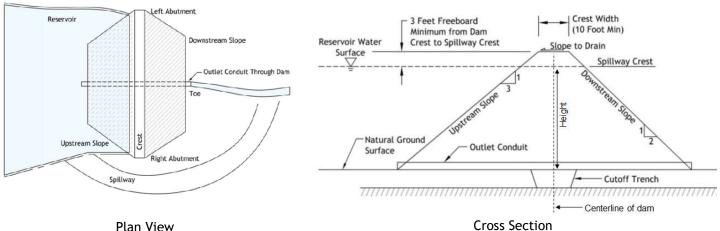




Table 1 Sizing Guidelines for Livestock Water Tanks and Erosion Control Dams

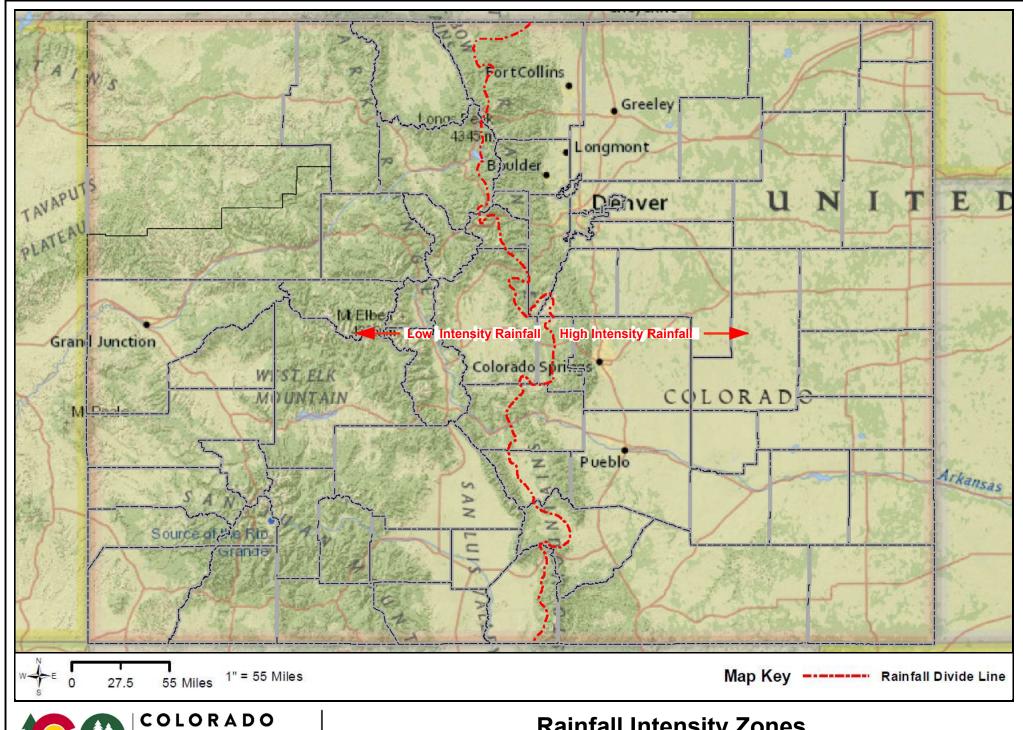
Drainage Area (Acres) <sup>3</sup>	Minimum Recommended Bottom Width¹ (Feet) Low Intensity Rainfall Zone²	Minimum Recommended Bottom Width¹ (Feet) High Intensity Rainfall Zone²
175	8	8
225	8	10
275	8	12
325	8	15
375	10	17
425	11	19
475	12	21
525	13	24
575	15	26
625	16	28
675	17	30
725	19	33
775	20	35
825	21	37
875	22	39
925	24	42
975	25	44
1025	26	46
1075	28	48
1125	29	51
1175	30	53
1225	31	55
1275	33	57
1325	34	59
1375	35	62
1425	37	64
1475	38	66

<sup>&</sup>lt;sup>1</sup>Minimum recommended bottom width for drainage areas less than 175 acres is 8 feet

<sup>&</sup>lt;sup>3</sup>USGS StreamStats (<a href="https://streamstats.usgs.gov/ss">https://streamstats.usgs.gov/ss</a>) can be used to estimate drainage area if unknown (note: 1 square mile equals 640 acres.



<sup>&</sup>lt;sup>2</sup>Refer to map of rainfall intensity zones





Rainfall Intensity Zones for Non-Jurisdictional Dam Spillway Sizing

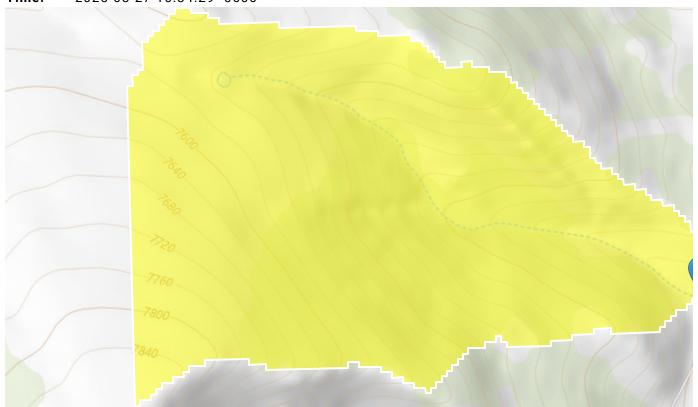
## StreamStats Report Yoast 11

Region ID: CO

Workspace ID: CO20250827163407582000

Clicked Point (Latitude, Longitude): 40.38818, -107.15429

Time: 2025-08-27 10:34:29 -0600



Collapse All

#### **>** Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.2	square miles
EL7500	Percent of area above 7500 ft	40	percent
I24H100Y	Maximum 24-hour precipitation that occurs on average once in 100 years	2.74	inches
PRECIP	Mean Annual Precipitation	22.21	inches

#### > Peak-Flow Statistics

#### Peak-Flow Statistics Parameters [Northwest Region Peak Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.2	square miles	1	5250
EL7500	Percent above 7500 ft	40	percent	0	99
PRECIP	Mean Annual Precipitation	22.21	inches	8	49

#### Peak-Flow Statistics Disclaimers [Northwest Region Peak Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

#### Peak-Flow Statistics Flow Report [Northwest Region Peak Flow]

Statistic	Value	Unit
50-percent AEP flood	3.63	ft^3/s
20-percent AEP flood	6.32	ft^3/s
10-percent AEP flood	9.09	ft^3/s
4-percent AEP flood	13	ft^3/s
2-percent AEP flood	17.1	ft^3/s
1-percent AEP flood	21.3	ft^3/s
0.5-percent AEP flood	26.3	ft^3/s
0.2-percent AEP flood	35.2	ft^3/s

Peak-Flow Statistics Citations

Capesius, J.P., and Stephens, V. C.,2009, Regional Regression Equations for Estimation of Natural Streamflow Statistics in Colorado: U. S. Geological Survey Scientific Investigations Report 2009-5136, 32 p. (http://pubs.usgs.gov/sir/2009/5136/)

https://streamstats.usgs.gov/ss/

#### Annual Flow Statistics

Annual Flow Statistics Parameters [Northwest Region Mean Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.2	square miles	1	5250
PRECIP	Mean Annual Precipitation	22.21	inches	8	49

Annual Flow Statistics Disclaimers [Northwest Region Mean Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Annual Flow Statistics Flow Report [Northwest Region Mean Flow]

Statistic	Value	Unit
Mean Annual Flow	0.0671	ft^3/s

Annual Flow Statistics Citations

Capesius, J.P., and Stephens, V. C.,2009, Regional Regression Equations for Estimation of Natural Streamflow Statistics in Colorado: U. S. Geological Survey Scientific Investigations Report 2009-5136, 32 p. (http://pubs.usgs.gov/sir/2009/5136/)

#### > Monthly Flow Statistics

Monthly Flow Statistics Parameters [Northwest Region Mean Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.2	square miles	1	5250
PRECIP	Mean Annual Precipitation	22.21	inches	8	49

Monthly Flow Statistics Disclaimers [Northwest Region Mean Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

#### Monthly Flow Statistics Flow Report [Northwest Region Mean Flow]

Statistic	Value	Unit
January Mean Flow	0.0116	ft^3/s
February Mean Flow	0.00769	ft^3/s
March Mean Flow	0.0098	ft^3/s
April Mean Flow	0.0359	ft^3/s
May Mean Flow	0.233	ft^3/s
June Mean Flow	0.0909	ft^3/s
July Mean Flow	0.162	ft^3/s
August Mean Flow	0.112	ft^3/s
September Mean Flow	0.0667	ft^3/s
October Mean Flow	0.0248	ft^3/s
November Mean Flow	0.0124	ft^3/s
December Mean Flow	0.0108	ft^3/s

Monthly Flow Statistics Citations

Capesius, J.P., and Stephens, V. C.,2009, Regional Regression Equations for Estimation of Natural Streamflow Statistics in Colorado: U. S. Geological Survey Scientific Investigations Report 2009-5136, 32 p. (http://pubs.usgs.gov/sir/2009/5136/)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.29.2

StreamStats Services Version: 1.2.22

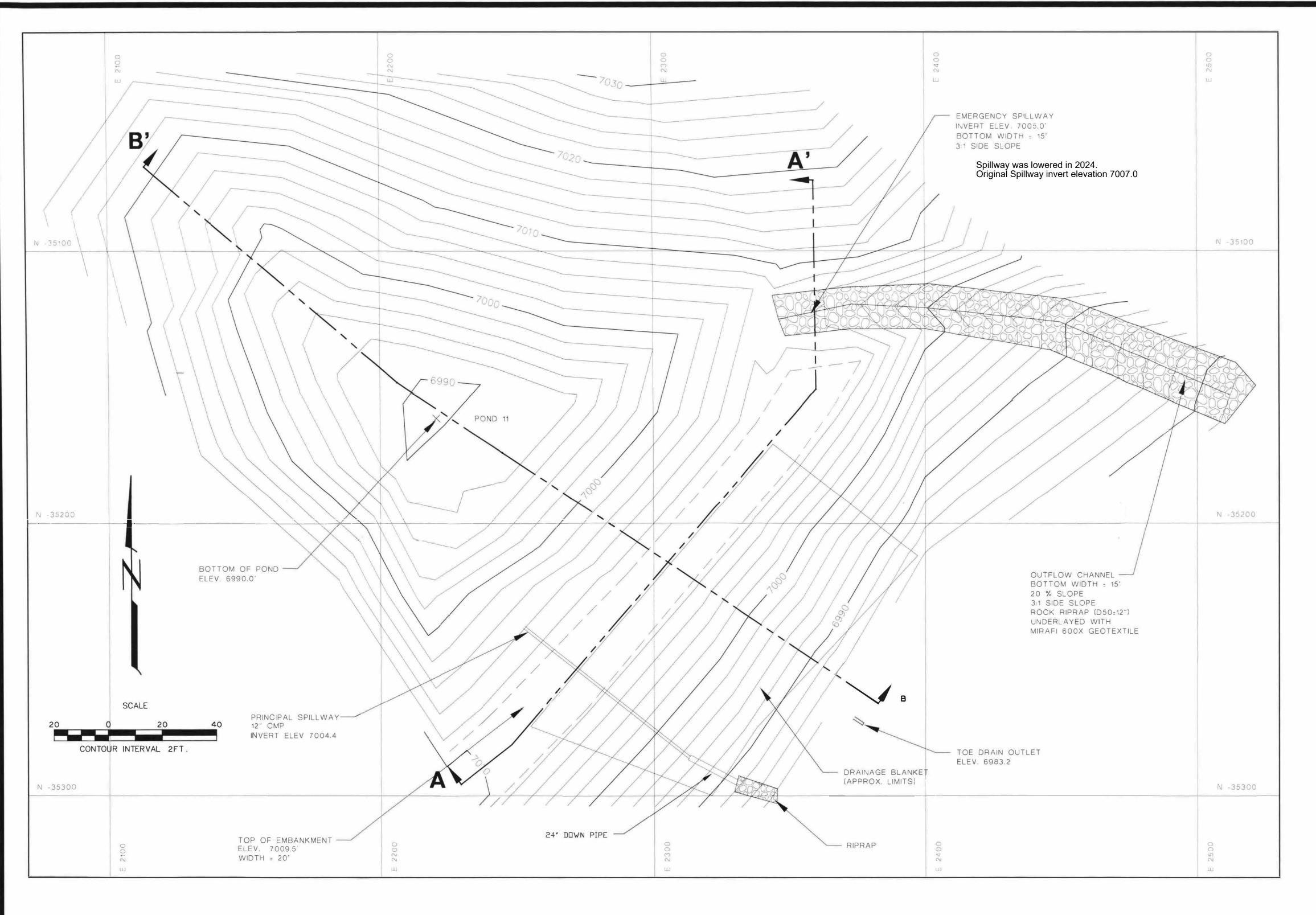
NSS Services Version: 2.2.1

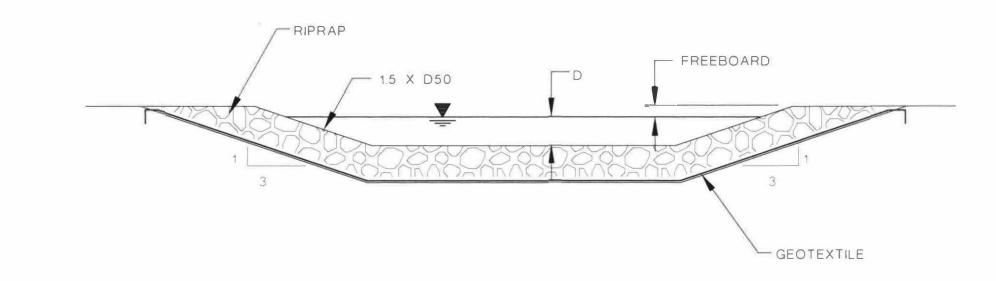


# Completion of Construction DRS-11A (10.11.2019)

Department of Natural Resources

1.	Dam Informat	ion								
	Name of Dam:	Yoas	st Pond 01	l1						
	WDID:									
	Receipt/Priority	Numbe	er:							
	Type of Dam:	$\simeq$	vestock Wa rosion Contr			_				
	Date Construction	on was	Completed:	10/1997						
2.	Location Infor	rmati	on			_				
		Control e the lo	Dam, pleas ocation info	se update th rmation, pl	ne PLSS ease use	or GPS Loc the Locat	ation inf	ormation below.	tion for Liv	estock Water Tank
	PLSS	-		_			_		5	
	Q40 Q160 NE SW		ection .6	5.0	$\exists$	N Os	Range 87	OEOV	V S	Routt
	GPS Location									
	<ul><li>Point taken s</li><li>Datum should</li></ul>			est of the c	lam abo	ve the stre	amline/d	outlet		
	Zone		Easting (U	ГМх)	North	ing (UTMy)				
	Zone 13		317160.8	3	4473	8051.7				
3. !	<ul><li>DWRPermits(</li><li>The making of</li></ul>	omplet Online@ of false r pursu	ted form ele	ectronically s s herein cor 5. 24-4-104	to the s	State Engin	the seco	ice Online Form and degree, which atements herein,	h is punish	
	Sign or Enter Na	me(s) o	of Responsib	ole Individua	al(s)					Date
	Mirando	a K	awcak	é						9/16/2024
	If Signing Enter N	Name a	and Title							
	Miranda Kaw	cak, E	Environme	ental Man	ager					

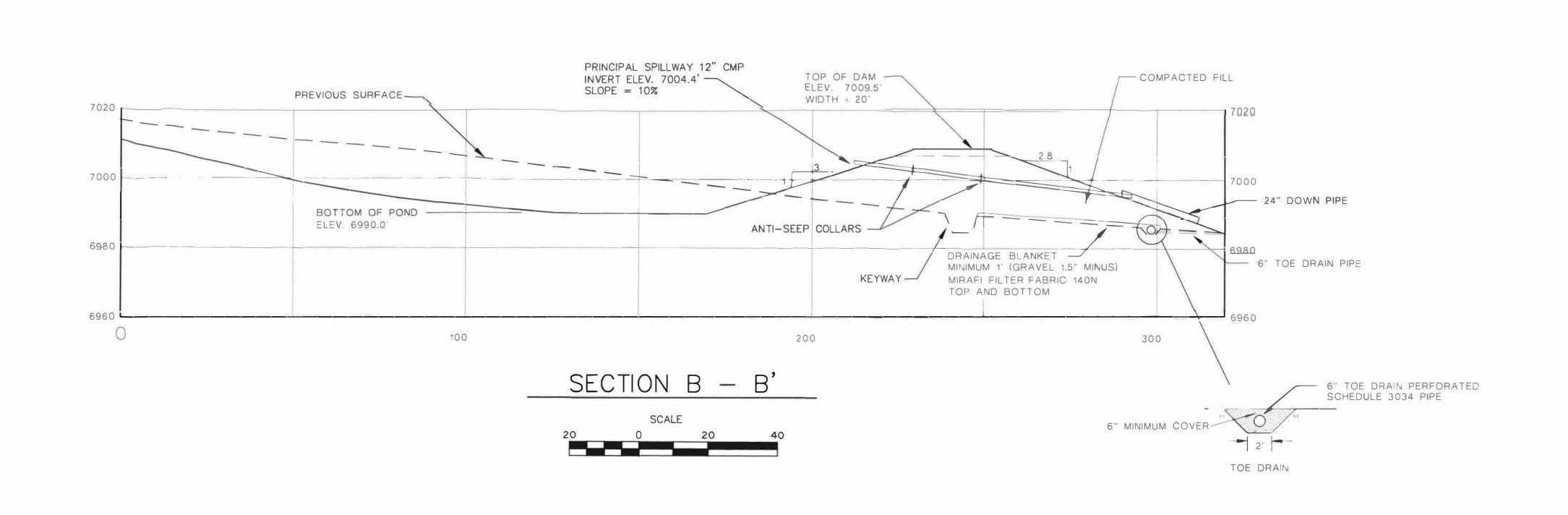


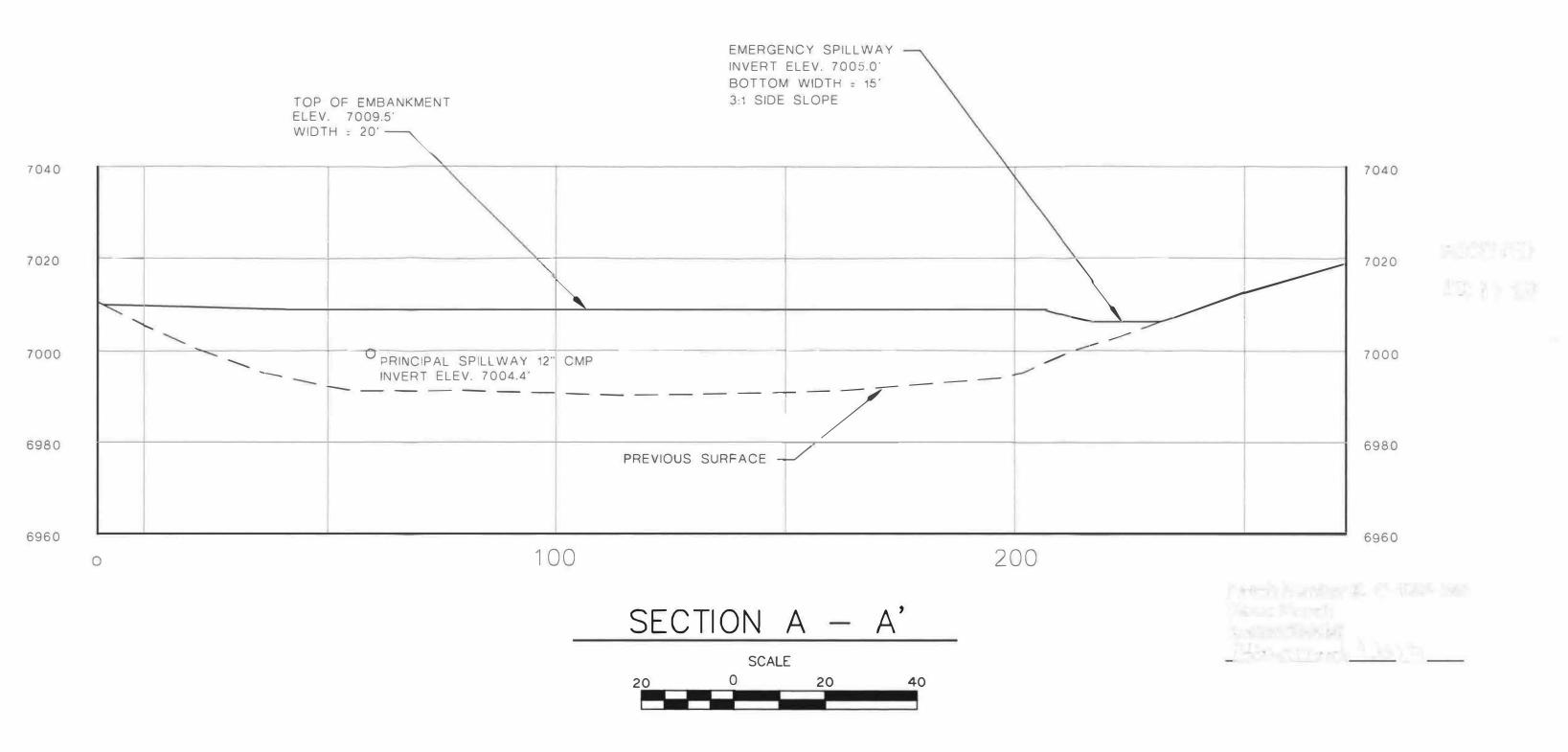


	E	EMER	GENCY	SPILLN	IAY S	CHEDULE	
SECTION	PEAK DISCHARGE (CFS)	SIDE SLOPE	CHANNEL SLOPE (%)	VELOCITY (FPS)	FLOW DEPTH (FT)	FREEBOARD (FT)	RIPRAP REQUIRED D(50) (IN)
Crest	38 2	3H 1V	0	19	1.1	1 4	NA
Outilow	38 2	3H 1V	20	14 6	02	18	9

		PON	ND 11 STAGE	CAPACITY	
ELEV. (FTMSL)	STAGE (FT.)	AREA (ACRES)	CAP. (ACFT.)	TOT. CAP.	DESCRIPTION
6990	0.00	0.01	0.00	0.00	BOTTOM OF POND
6992	2.00	0.08	0.07	0.07	
6994	4.00	0.12	0.20	0.27	
6996	6.00	0.17	0.30	0.57	
6998	8.00	0.23	0.40	0.97	
7000	10.00	0.30	0.53	1.50	
7002	12.00	0.37	0.67	2.17	
7004	14.00	0.45	0.82	2,99	
7004.4	14.4	0.47	0.18	3.17	PRINCIPAL SPILLWAY
7005	15.0	0.51	0.33	3,50	EMERGENCY SPILLWAY
7007	17.0	0.56	0.55	4.53	BENESIST ST. DO?
7008	18.0	0.59	0.57	5.10	
7009.5	19.5	0.66	0.93	6.03	TOP OF EMBANKMENT

POND 11 PLAN VIEW





ENGINEER'S CERTIFICATION

Michael & Ottovilla

ENGINEER

Date: DEC 12 1997

-	LEGEND
_ 5660	SURFACE CONTOUR
X'X	FENCE LINE
~~	C DRAINAGE
	PERMIT BOUNDARY
<b>~~~</b>	POWER LINE
	PAVED ROAD
	DIRT ROAD

	REVIS	SIONS	EXHIBIT 13-5A			
		DESCRIPTION	AS-BUILT			
MGA	11/97	TR-08	A3-DUIL1			
	09/24	Spillway Elev	PONE	)-011		
			YOAS SENECA COAL CO. 1300 S.	T MINE yale flagstaff, az 860		
			DESIGNED BY: P.W.C.C.	SCALE: AS SHOWN		
			DRAWN BY: J.M.B.	DRAWING DATE:11/97		
			CHECKED BY: M.G.A.	PHOTO DATE:		
			CONTOUR INTERVAL: 2 FT.			



#### Livestock Water Tank and Erosion Control Dam Registration Field Sheet and Checklist

This sheet is populated based on application and field inspection information. It is used by the Division Engineer or other staff to provide the appropriate response to applicants.

Priority/Receipt Number (from DAMS database): 19131

**DWR Admin Staff:** Christina Redman

**DWR Field Staff:** Sarah Myers

**Division:** Division 6

Water District: 57 Middle Yampa River

Source Stream: Unnamed tributary of Grassy Creek

Name of Dam or Owner: Peabody

Type of Structure: Livestock Water Tank Existing or Proposed: Existing Dam

Date that response from field staff is required (approx. 7 days after application is received) [statute requires a response from DWR to applicant within 15 days of receiving

application]: 5/15/2025

Information to convey to applicant is shown in *green italics*. Required denial is shown in *red italics*. Follow up actions by admin staff are shown in *purple italics*.

#### A) Field Verified Location

- Is observed location described correctly in the application? No [If no, inform applicant that the location on their application was not correct and the location has been modified in DWR's database, Admin staff should update correct information in the DAMS database]
- If no, what are the corrections?
   Easting <u>317142</u>, Northing <u>4473067</u> Zone: <u>13</u>
   ½ ½ Section: , Township , Range , Principal Meridian

#### B) Structure Dimensions

- DWR estimated drainage area (Office Staff). Determine drainage area from USGS
   Streamstats or other source (acres). Field staff, verify or correct drainage area. 128
- What method was used to estimate the drainage area? <u>USGS Streamstats (results saved</u>



#### to the file)

- Recommended spillway width based on drainage area: 8
- Does the spillway width meet or exceed the recommendation in Table 1? <u>Yes</u> [If no, recommend that the spillway width comply with Table 1]
- Is the freeboard at least 3 feet? <u>Yes</u>
  [If no, recommend freeboard be increased to at least 3 feet]
- Is the capacity less than ten acre-feet at the spillway crest? Yes [If no, deny per statute]
- Is the dam vertical height less than fifteen feet? Yes [If no, deny per statute]

#### C) Specifications for Crest Width & Slopes

(only provided when width or slope do not meet the minimum recommended specifications)

- Crest Width (ft.) (if less than 10 feet) 10
- Proposed Upstream Slope (Ratio) (if steeper than 3:1) no
- Proposed Downstream Slope (Ratio) (f steeper than 2:1) no

[If appropriate, recommend that structure conform to minimum specifications]

#### D) Water Administration Information

Is the stream channel normally dry? Yes

[If **no**, deny per statute]

Dry 80% of the time during the calendar year with no additional source of water such as ditch water:

- Does field verification show any existing tanks actually downstream of location? (yes/no and receipt numbers) no
- Are inhabited structures or roadways located within ¼ mile downstream of the

<sup>&</sup>lt;sup>1</sup> Vertical Height is measured from the elevation of the lowest point of the natural surface of the ground or the invert of the outlet conduit (whichever is lower) where that point occurs along the longitudinal centerline of the dam up to the crest of the emergency spillway of the dam, or the top of the dam if there is not a separate spillway (see diagram in application).

structure? Yes [If yes, request a Dam Safety review if not already completed]

Livestock Water Tank	Erosion Control Dam
Is there an outlet conduit that will allow all water to be released to a senior structure if required? No [If no, Division Engineer should deny application or grant a waiver per 35-49-111)	Is there an ungated outlet tube large enough (and at least 12 inches in diameter) to assure adequate capacity to drain within thirty-six hours any impoundment in excess of two acre-feet? <sup>3</sup> [If no, deny]
Does the structure store water for only livestock watering purposes?  It was part of the mine plan but it is my understanding that it is getting released for bond once these have been approved so it is no longer being used for industrial purposes.  [If no, deny]	Is the structure used for erosion control with no use of detained/stored water?  (Note: Erosion control potential is not evaluated)  [If no, deny]

#### E) Existing Dam Field Verification

(only provided for structures already constructed)

- Does the structure expose groundwater?<sup>4</sup> No [If yes, deny]
- Is information about the structure correctly described in the application? (if no, the following section allows you to describe the necessary corrections);
   If no, the following are corrections based on field observations:
   [Notify applicant of any corrections, update database for corrections to items in

<sup>&</sup>lt;sup>2</sup> The State Engineer has discretion to waive this requirement per section 35-49-111 if not required for safety or senior structures.

<sup>&</sup>lt;sup>3</sup> Required section 37-87-122(3). The two acre-feet of storage below the ungated outlet tube is likely to fill with sediment. Therefore, an additional gated outlet tube at the bottom is not necessary in most cases, to administer ECD to make releases to senior LSWT.

<sup>&</sup>lt;sup>4</sup> LSWT and ECD must not expose groundwater both due to the "normally dry stream" requirement and because a structure exposing groundwater is a well, which requires a well permit.

# LSWT FIELD CHECKLIST LSWT NAME Yoast 11 WC completing this form Sarah Myers Date of field visit May 15, 2025

PLEASE CONFIRM THE FOLLOWING	Notes/Corrections	YES	NO
Is the location listed on the application correct?			X
If no, please enter the correct location here	Easting: 317142 Northing: 4473067 the values are pretty close but this is more accurate.		
WC must confirm Source Stream	Unnamed tributary of Grassy Creek		
Using streamstats determine the recommended drainage area	Recommended drainage area 0.2 square miles_(128 Acres)		
What is the recommended spillway width based on the drainage area?	Recommended spillway width8 feet		
Is there a spillway?		X	
WC must confirm the spillway size if existing dam	Ranged from 9-12'		
Does the spillway width meet or exceed the recommended width aligned with the drainage area?		Х	
Is the freeboard at least 3 feet?	I got 4'	Х	
Is the capacity less than 10 acre feet at the spillway crest?		Х	
Is the dam height less than 15 feet?	I got an estimated 12.7 with eye level so 15 is probably close to accurate.	х	
Is the crest width less than 10 feet?	Embankment was highly vegetated but I would say it was at least 10' wide.		Х
Is the upstream slope steeper than 3:1			X
Is the downstream slope steeper than 2:1			Х
Is the stream dry 80% of the year? Dry 80% of the time during the calendar year with no additional source of water such as ditch water	Drainage was dry during visit in May so I would say yes	х	
Are there existing tanks downstream? if yes please name them			Х
Are inhabited structures or roadways located within ¼ mile downstream of the structure?	There is a road just south of the pond but I can't find if its a county road or just an unnamed road.	х	

Is there an outlet conduit that will allow all water to be released to a senior structure if required?	There is a trickle tube but not a low level outlet		X
Is this being used for livestock/wildlife only	It was part of the mine plan but it is my understanding that it is getting released for bond once these have been approved so it is no longer being used for industrial purposes.	x	
Does the structure expose groundwater?	Not that I know of.		X
Additional information as needed			







# LSWT CVRLTR RVSD 202507

Final Audit Report 2025-09-04

Created: 2025-09-02

By: Christina Redman - DNR (christina.redman@state.co.us)

Status: Signed

Transaction ID: CBJCHBCAABAAZ41ymBhOw\_4KT6grjDuvUEp-3Ro0TRHr

### "LSWT CVRLTR RVSD 202507" History

Document created by Christina Redman - DNR (christina.redman@state.co.us) 2025-09-02 - 3:22:25 PM GMT

Document emailed to Erin Light (erin.light@state.co.us) for signature 2025-09-02 - 3:32:37 PM GMT

Email viewed by Erin Light (erin.light@state.co.us) 2025-09-02 - 9:42:23 PM GMT

Document e-signed by Erin Light (erin.light@state.co.us)
Signature Date: 2025-09-04 - 2:44:10 AM GMT - Time Source: server

Agreement completed. 2025-09-04 - 2:44:10 AM GMT