## Worthington | DAMSignage



You May Be Under Video Surveillance

Headpond **Canoe/Kayak Portage Spillgates Tailrace/Spillway Rising Waters** Low Head Dams

Signage is a first line of defense to warn the public about the dangers of water intakes, open spill gates, turbulent water and more. Properly executed, signage is an effective mitigation tool to safeguard the public, reduce risk, and lower exposure to liability.

ONTARIO**power** 

Done poorly, signage can be confusing, ineffective, and potentially expose dam owners to greater scrutiny and liability.

Worthington's team of seasoned advisers understands signage specifically for dam owners. We adhere to the leading best practices for safety signage around dams. Our team can guide you on placement, size, color, wording, materials and more for a single dam location or as part of a corporate signage program.



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### **Elements of a Worthington Dam Sign**



**SIGNAL WORD** - Hi-Visibility Helvetica or Arial Font, All Caps

- DANGER
- WARNING

**COLOR** - Text color stands out against background color.

- DANGER White text, Red Background
- WARNING Black Text, Yellow Background

**MESSAGE PANEL** - Sized to Viewing Distance. First letter caps for each word only

- Defines the danger (ie: Dam Ahead)
- Specifies the Action (ie: Keep Away)

ALIGNMENT - Left aligned allows for 14% faster reading

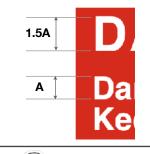
**OWNERSHIP PANEL** - Facility Name, Logo, Emergency Contact Information, Sign Locator ID

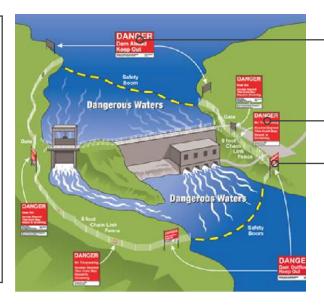
## **General Sizing Guidelines**

Actual sizes are based on risk factors including severity of consequences, approach speed, viewing distances, message text height, angle, lighting, etc.

### **TEXT HEIGHT**

Signs are sized so the wording in the message panel can be read at a distance. The first uppercase letter in the Message Panel is the "A" dimension.





**UPSTREAM FACING** - Sized to Viewing Distance & Speed. 4ft x 6ft, 8ft x 12ft, 10ft x 20ft and larger.

**LAND FACING** - Sized to Viewing Distance & Speed. 1ft x 2ft, 2ft x 4ft.

**DOWNSTREAM FACING** - Sized to Viewing Distance & Speed. 4ft x 6ft, 8ft x 12ft, 10ft x 20ft and larger.



## Standard Sign Inventory - Type I

Designed for greater viewing distance. Simple text for maximum distance and quick read time. Type-I signs feature 2-lines of message text. Line 1 answers the question of what is the danger (eg: Dam Ahead). Line 2 defines what action is required (eg: keep out).

Headpond Signs							
DANGER	DANGER	DANGER	DANGER		WARNING		
Dam Ahead Keep Out	Dam Ahead Keep Away	Water Intake Keep Out				Dam Downstream	
(Station Name) Generating Station Is An Emergency Call: 911 or 1.XXX.XXX.XXXX.XXXX	(Station Name) Generating Station in An Emergency Call: \$11 or 1+000+000+0000	(Station Name) Generating Station is An Errergency Call: 911 or 1-000-000-0000	(Station Name) Generating Station is An Emergency Call: 911 or 1-300-3004-3004-	<u>.</u>	(Station Name) Ge In An Emergency	renating Station Call: \$11 or 1-00X-60X-000X	<u>.</u>
Tailrace/Spillway Signs		_		"A	"		٩G
DANGER	DANGER	HEIGHT	LENGTH	DIMEN	SION	DISTANCE	
Dam Outflow	— —	4'-0"	6'-0"	7.3	3"	255 FT	
	Dam Upstream	6'-0"	9'-0"	11.	1"	383 FT	
Keep Out	Keep Out	8'-0"	12'-0"	14.8"		511 FT	
Biation Name) Generating Station In An Emergency Call: 91 or 1-XXX-XXX-XXX-XXXX	(Station Name) Generating Station In An Emergency Call: 911 or 1-XXX-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	10'-0"	15'-0"	18.	5"	639 FT	
in An Emergency Call STI OF TAXAADAACC	In An Emergency Call: 911 or 1-XXX-XXXX VXXX	16'-0"	24'-0"	29.	6	1023 FT	
		20'-0"	30'-0"	37.	0"	1280 FT	

## Standard Sign Inventory - Type II

Faces away from water towards land where viewing distance may be close and reaction time extended. Because of the increased wording on type-II signs, the viewing distance compared to a similarly sized Type-I sign is reduced by roughly 50%. The first line of message text in type-II signs combines the definition of the danger (eg: Dam Ahead) with the action (eg: Keep Out). The next section of message text generally defines the risk (eg: Access Beyond This Point May Result In Drowning).

HEIGHT

4'-0"

6'-0"

8'-0"

10'-0"

12'-0"

16'-0"

#### **Headpond Signs**

	DANGER	DANGE
	Dam Ahead - Keep Out	Water Intake - Keep
	Access Beyond This Point May Result in Drowning	Access Beyond The May Result in Drow
ſ	(Bistion Name) Generating Station In An Emergency Call. 911 or 1-300(300(3000)	(Station Name) Generating Station In An Emergency Call: 011 or 1-XXX-KKK-X000K

#### Tailrace/Spillway Signs

DANGER
Dam Outflow - Keep Out
Access Beyond This Point May Result in Drowning

(Station Name) Generating Station In An Energency Call: 911 or 1.300(300(300) éa.

Dam Upstream - Keep Out This Riverbed Floods Without Warning (Station Name) Concessing Station In An Emergency Gall: \$11 or 1-KEX-KKX-KKX-KKKK ét.

ANGER

itake - Keep Out

**Beyond This Point** sult in Drowning

Êt

DANGER

Dam Upstream Water Levels & Flow May Change Without Notice (Station Name) Generating Station In An Emergency Call, 911 or 1-920-223-223X 22 WARNING

LENGTH

6'-0"

9'-0"

12'-0"

15'-0"

18'-0"

24'-0"

Dam Upstream Water Levels & Flow May **Change Without Notice** Station Name) Generating Station in An Emergency Call 911 er 1 XO-306 XOX έk

Si Habla Español

PELIGRO

"**A**"

DIMENSION

3.5"

5.4"

7.2"

9.0"

10.8"

14.4

SAFE VIEWING DISTANCE

124 FT

187 FT

249 FT

311 FT

374 FT

500 FT

Descarga Pesada Mantener Distancia Agua Aireada se Hundirá o Volcará Los Barcos (Xxxxxxxxxxxxx) Generating Station



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## Low Head Dam Signs





## **Pictographs & Symbols**

Enhance sign effectiveness with pictographs & symbols

Ice



Steep

Banks

Unprotected

Spillway

Low Head

Dam

Water Level

Change

Discover more with these informative videos (Click to open or visit www.youtube.com/c/Tuffboom)

Dam

Outflow

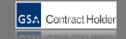
Current











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