

## Dam Owner Annual Inspection Form Earthen Dams

Project Data	
Dam Name:	
County:	State Dam No. (if known)
Owner Name:	
Owner Address:	Telephone No.:
	E-mail address:
Inspected by:	
Inspection Date:	Weather:
Directions	
be taken to remedy any issues found. Mail or email	the overall condition of each structure and what actions will a copy of the completed form to the Dam Safety Office.  of dam footprint on page 6 and attach photos on page 7

For concrete structures associated with your dam, check the "concrete in poor condition" box if you notice signs of settlement, misalignments, heaving, offset joints, cracks, or exposed reinforcements and make a note of what you have found in the line for overall condition.

Reservoir Data				
Reservoir Level at time of inspection feet below dam crest				
Reservoir Outflow at time of	inspection cfs or	gpm		
Condition of Dam (embank	ment, abutments, foundation)			
<b>Dam crest</b> Check all that apply:				
<ul><li>☐ low areas</li><li>☐ horizontal misalignment</li></ul>	<ul><li>☐ surface cracking</li><li>☐ ruts</li></ul>	<ul><li>□ animal burrows</li><li>□ trees</li></ul>	□ brush	
Overall condition:				
Actions needed:				
<u>Upstream face</u> Check all that apply:				
□ slumps	☐ sinkholes	☐ animal burrows		
□ slides	☐ slope protection	☐ trees		
□ scarps	☐ wave erosion	□ brush		
Overall condition:				
Actions needed:				

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6831 or visit <a href="https://ecology.wa.gov/accessibility">https://ecology.wa.gov/accessibility</a>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

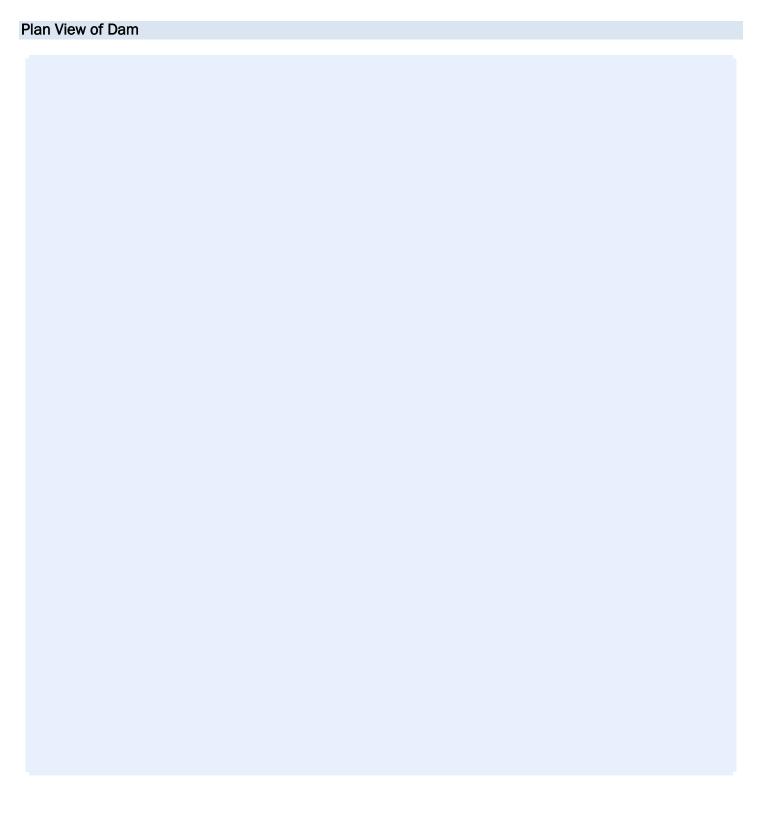
Condition of Dam Cont. (	embankment, abutments,	roundatic	on)			
Downstream face and toe	Check all that apply:					
☐ wet or soft areas	□ scarps		erosion		☐ water-loving vegetatio	n
□ slumps	□ sinkholes		unusual move	ment	□ trees	
□ slides	☐ change in slope		animal burrow	vs	☐ brush	
Is there seepage? ☐ Yes	□ No	If yes,				
Location of seep:			Is the seep?		·	
Estimated flow:		_	Is there sedim	ent?	Yes □ No	
Overall condition:						
Actions needed:						
<b>Pond liner</b> Check all that apply:						
☐ slope slumping			☐ ballooning	of liner		
☐ tears, punctures, abrasio	n, other damage		☐ gas vents o			
☐ seam separation	,		_		integrity issues	
☐ liner attachment issues t	o pipes, ramps, manholes		· ·	-	straps issues	
			$\square$ liner subgrade support movement or displacement			
Overall condition:						
Actions needed:						
Internal leak detection systematics	<u>em</u>					
Check water level in sump. I	s water present: $\Box$ Yes	S	□ No			
Damage to pipe boot at rise	r? 🗆 Ye	S	□ No			
Odors coming from inside ris	ser boot?	S	□ No			
Overall condition:						
Actions needed:						
Drop Inlet Spillway or Cul	vert (Pipe) Spillway					
Spillway entrance or approa	ach channel Check all that ap	ply:				
☐ debris	□ other obst	ructions		□ trash	n rack in good condition	
□ vegetation	☐ erosion pro	otection			-	
□ slides	□ other debr					
Overall condition:						
Actions needed:						
Intake or riser structure Loc	ok at riser crest, sidewalls,	floor, tras	sh rack, air ven	t. Check all t	hat apply:	
☐ misalignment	☐ concrete d	eteriorat	ion	□ air v	ent obstruction	
☐ movement	☐ seepage at	joints or	cracks	□ debr	is	
□ settlement	□ metal corr	-		□ vano		
□ cracking	☐ missing bo					
Overall condition:	_					
Actions needed:						
ACCIONS NECUCU.						

Drop Inlet Spillway or Culvert (Pipe	e) Spillway Cont.	
Gates and gate controls Check all that ap	oply: (leave blank if not applicable)	
<ul><li>□ operable and working</li><li>□ corrosion</li></ul>	<ul><li>☐ deterioration</li><li>☐ vandalism</li></ul>	<ul><li>□ other damage</li><li>□ annual maintenance has been done</li></ul>
Overall condition:		
	etal condition, protective coating, pipe j	
□ debris	ctar condition, protective conting, pipe j	cavitation
□ other blockage or obstruction		☐ seepage from drains/pipe exterior
☐ joint separation	□ settlement	= seepage nonvariants, pipe exterior
□ movement	□ corrosion	
Overall condition:		
Actions needed:		
Pipeline outfall or stilling basin Check		
□ debris	□ cracks	☐ undermining
□ vegetation	☐ deterioration	☐ gabions in poor condition
□ concrete condition poor	□ settlement	☐ riprap layer in poor condition
□ movement	□ erosion	— Tiprop layer III poor condition
Lead-out drain outfall(s)		
Able to locate? ☐ Yes ☐ No	Is there evidence of se	eepage? □ Yes □ No
	is there evidence of se	
Open Channel Spillway or Weir Dro	op Structure	
Spillway entrance and overflow section Look at channel base, side slopes; conditions	on, or weir overflow structure crete floor, sidewalls; weir boards. Check	all that apply
☐ debris	□ cracks	☐ gabions in poor condition
□ vegetation	☐ deterioration	☐ riprap layer in poor condition
□ slides	☐ settlement	☐ weir boards in poor condition
□ other obstructions	□ cavitation	☐ log boom in poor condition
☐ concrete in poor condition	☐ erosion in earth or grass-lined	☐ other debris barrier in poor
☐ movement	channel	condition
Overall condition:		
Actions needed:		

Gates and gate controls   Check all that apply: (leave blank if not applicable)   operable and working   deterioration   other damage   annual maintenance has been done   Overall condition:
□ corrosion □ vandalism □ annual maintenance has been done   Overall condition: □   Actions needed: □   Outlet channel Check: channel base, side slopes; concrete floor, sidewalls. Check all that apply:   □ debris □ cracks □ gabions in poor condition   □ slides □ settlement □ seepage from under-drains or   □ other obstructions □ erosion in earth or grass-lined   □ movement □ channel    Overall condition:    Spillway outfall or stilling basin   Check all that apply:   □ debris □ cracks □ undermining   □ vegetation □ deterioration □ gabions in poor condition   □ concrete in poor condition □ settlement □ riprap layer in poor condition   □ concrete in poor condition □ settlement □ riprap layer in poor condition   □ concrete in poor condition □ erosion    Overall condition:    Actions needed:
Overall condition:  Actions needed:  Outlet channel Check: channel base, side slopes; concrete floor, sidewalls. Check all that apply:    debris
Actions needed:    Outlet channel Check: channel base, side slopes; concrete floor, sidewalls. Check all that apply:   debris
Outlet channel     Check: channel base, side slopes; concrete floor, sidewalls. Check all that apply:       debris     cracks     gabions in poor condition       vegetation     deterioration     riprap layer in poor condition       slides     settlement     seepage from under-drains or along concrete exterior       other obstructions     cavitation     along concrete exterior       concrete in poor condition     erosion in earth or grass-lined channel       Overall condition:     Actions needed:       Spillway outfall or stilling basin     Check all that apply:       debris     cracks     undermining       vegetation     deterioration     gabions in poor condition       concrete in poor condition     settlement     riprap layer in poor condition       movement     erosion       Overall condition:       Actions needed:
□ debris □ cracks □ gabions in poor condition   □ vegetation □ deterioration □ riprap layer in poor condition   □ stides □ settlement □ seepage from under-drains or along concrete exterior   □ other obstructions □ cavitation □ along concrete exterior   □ concrete in poor condition □ erosion in earth or grass-lined channel   ○ Overall condition: □ Actions needed:   Spillway outfall or stilling basin check all that apply: □ undermining   □ debris □ cracks □ undermining   □ vegetation □ deterioration □ gabions in poor condition   □ concrete in poor condition □ settlement □ riprap layer in poor condition   □ movement □ erosion    Overall condition:  Actions needed:  Actions needed:
□ debris □ cracks □ gabions in poor condition   □ vegetation □ deterioration □ riprap layer in poor condition   □ stides □ settlement □ seepage from under-drains or along concrete exterior   □ other obstructions □ cavitation □ along concrete exterior   □ concrete in poor condition □ erosion in earth or grass-lined channel   ○ Overall condition: □ Actions needed:   Spillway outfall or stilling basin check all that apply: □ undermining   □ debris □ cracks □ undermining   □ vegetation □ deterioration □ gabions in poor condition   □ concrete in poor condition □ settlement □ riprap layer in poor condition   □ movement □ erosion    Overall condition:  Actions needed:  Actions needed:
□ vegetation □ deterioration □ riprap layer in poor condition   □ slides □ settlement □ seepage from under-drains or along concrete exterior   □ other obstructions □ cavitation □ along concrete exterior   □ concrete in poor condition □ erosion in earth or grass-lined channel   ○ other obstructions □ erosion in earth or grass-lined channel   ○ other obstructions □ channel   ○ overall condition: □ channel   ○ spillway outfall or stilling basin check all that apply: □ undermining   □ debris □ cracks □ undermining   □ vegetation □ deterioration □ gabions in poor condition   □ concrete in poor condition □ settlement □ riprap layer in poor condition   □ movement □ erosion    Overall condition:  Actions needed:  Actions needed:
□ other obstructions □ cavitation along concrete exterior   □ concrete in poor condition erosion in earth or grass-lined channel    Overall condition:  Actions needed:  Spillway outfall or stilling basin Check all that apply:  □ debris □ cracks □ undermining □ vegetation □ deterioration □ gabions in poor condition □ concrete in poor condition □ settlement □ riprap layer in poor condition □ movement □ erosion   Overall condition: Actions needed:
□ concrete in poor condition □ erosion in earth or grass-lined channel   Overall condition: □   Actions needed: □   Spillway outfall or stilling basin debris □ cracks □ undermining   □ vegetation □ deterioration □ gabions in poor condition   □ concrete in poor condition □ settlement □ riprap layer in poor condition   □ movement □ erosion    Overall condition:  Actions needed:
□ movement channel   Overall condition:
Overall condition:  Actions needed:  Spillway outfall or stilling basin Check all that apply:  debris   cracks   undermining   gabions in poor condition   settlement   riprap layer in poor condition   movement   erosion  Overall condition:  Actions needed:
Actions needed:    Spillway outfall or stilling basin   Check all that apply:   undermining   undermining   gabions in poor condition   gabions in poor condition   riprap layer in poor condition   movement   erosion   Concrete in poor condition:   Actions needed:
Spillway outfall or stilling basin     Check all that apply:       debris     cracks     undermining       vegetation     gabions in poor condition       concrete in poor condition     settlement     riprap layer in poor condition       movement     erosion       Overall condition:       Actions needed:
□ debris       □ cracks       □ undermining         □ vegetation       □ deterioration       □ gabions in poor condition         □ concrete in poor condition       □ settlement       □ riprap layer in poor condition         □ movement       □ erosion         Overall condition:       □         Actions needed:       □
□ debris       □ cracks       □ undermining         □ vegetation       □ deterioration       □ gabions in poor condition         □ concrete in poor condition       □ settlement       □ riprap layer in poor condition         □ movement       □ erosion         Overall condition:       □         Actions needed:       □
□ vegetation       □ deterioration       □ gabions in poor condition         □ concrete in poor condition       □ settlement       □ riprap layer in poor condition         □ movement       □ erosion         Overall condition:       □         Actions needed:       □
□ concrete in poor condition     □ settlement     □ riprap layer in poor condition       □ movement     □ erosion       Overall condition:
☐ movement ☐ erosion  Overall condition:  Actions needed:
Actions needed:
Actions needed:
Unider-drain Outrails Check all that apply:
Able to locate? ☐ Yes ☐ No Is there evidence of seepage? ☐ Yes ☐ No
Overall condition:
Actions needed:
Low-Outlet Works (visible elements)
<u>Intake structure</u> (if visible) Check all that apply:
☐ debris ☐ other debris barrier in poor ☐ metal in poor condition
□ other obstructions condition
$\square$ trash rack in poor condition $\square$ concrete in poor condition
Overall condition:
Actions needed:
Gates/valves and control mechanisms Check all that apply:
□ operable and working □ deterioration □ other damage
□ corrosion □ vandalism □ annual maintenance has been done
Overall condition:  Actions needed:

ments)				
t concrete or metal co	ndition, protective coating,	pipe joints. Check all that apply:		
_	□ gabio□ ripra□ ripra	page from drains/pipe exterior ons in poor condition at outfall ap in poor condition at outfall		
(leave blank if not app	olicable)			
	Presence of fines or seding	ment? □ Yes □ No		
	Estimated/measured flow	measured flow(s):		
	Measuring devices:			
neration and Mainte	enance (O&M) Manual			
_				
	deterioration   deterioration   settlement   corrosion   cavitation   undermining at out	t concrete or metal condition, protective coating,  deterioration seep settlement gabi corrosion ripra undermining at outfall  Presence of fines or sedion Estimated/measured flow Measuring devices:  Readings:		

**Additional Comments** 



(Insert plan view of dam and spillways)

Photographs			
(Insert	photograp	phs)	

Mail or email a copy of this completed form to the attention of the Dam Compliance Technician at Ecology's Dam Safety office:

By email: damsafety@ECY.WA.GOV

By mail: Washington State Dept. of Ecology

**Dam Safety Office** 

Attn: Dam Compliance Technician

PO Box 47600

Olympia, WA 98504-7600

## Problems found during your inspection?

If a problem is observed, please call the Dam Safety Office at (360) 407-6872 during business hours for guidance and assistance.

If it is an emergency call:

- 1. Call 911
- 2. Call State Division of Emergency Management
  - a. Call the Duty Officer (available 24 hours/day) at 1-800-258-5990
  - b. Clearly state that this is a "dam safety emergency"

## Would you like a customized inspection form?

If you have found that this form has sections that do not apply to your dam or there are aspects to your dam that are not captured in this form, contact the Dam Compliance Technician at (360) 407-6613 or <a href="mailto:damsafety@ECY.WA.GOV">damsafety@ECY.WA.GOV</a> and we will create an Annual Inspection Form specific to your dam.

## **Helpful Documents and Information**

Ecology's Dam safety website: https://ecology.wa.gov/Water-Shorelines/Water-supply/Dams

Documents found there:

- General information and dam ownership responsibilities
- Dam owner's guidance manual
- Impacts of animals on earthen dams
- Impacts of plants on earthen dams
- Burrowing animal guidance