

**WASHINGTON STATE DEPARTMENT OF ECOLOGY  
DAM SAFETY OFFICE  
CLASS 1 & 2 PERIODIC INSPECTION FORM**

**I. GENERAL DATA**

**A. Background Information**

- 1) Dam Name: \_\_\_\_\_
- 2) DSO/Ecology File No.: \_\_\_\_\_
- 3) Date of Inspection: \_\_\_\_\_ Date(s) of Construction: \_\_\_\_\_
- 4) DSO Inspection Team: \_\_\_\_\_  
\_\_\_\_\_
- 5) Owners and/or Representatives Present During Inspection: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 6) Weather: \_\_\_\_\_

**B. Operational Status at Time of Inspection:**

- 7) Datum Used: \_\_\_\_\_
- 8) Reservoir Water Surface Elevation: \_\_\_\_\_

**II. CONDITION OF DAM**

**A. Embankment Dam**

1) CREST	Yes	No	Comment
Surface Cracking.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Visible Settlement .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sinkholes or depressions.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Horizontal misalignment.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Vehicle Ruts .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trees or Brush.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies _____			_____
_____			_____

**2) UPSTREAM SLOPE**

**Yes**

**No Comment**

Surface Cracking .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Slides or Slumps .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sinkholes or Depressions .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Animal Burrows .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Wave Erosion Damage .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trees or Brush .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies _____			
_____			

**3) DOWNSTREAM SLOPE**

**Yes**

**No Comment**

Surface Cracking.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Slides or Slumps .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sinkholes or Depressions.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Animal Burrows.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Seepage or Wet Areas on Slope.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Quantity of Flow: _____			
Trees, Brush, Vegetation.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Erosion of Slope.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies _____			
_____			

**4) ABUTMENTS & FOUNDATION**

**Yes**

**No Comment**

Cracking or Joints .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Slides or Slumps .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sinkholes or Depressions.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Animal Burrows .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Seepage or Wet Areas.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Quantity of Flow: _____			
Trees, Brush, Vegetation .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Movement.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies _____			
_____			

**5) SEEPAGE AND DRAINAGE SUMMATION:** \_\_\_\_\_

\_\_\_\_\_

(Note: location[s], estimated flow[s], color [staining], toe drain, clearness of flow, fines, measuring devices)

**6) PIEZOMETERS:** \_\_\_\_\_

\_\_\_\_\_

(Note: location, readings, condition of casing, security)

**B. Principal Spillway**

**1) APPROACH CHANNEL**

**Yes No Comment**

Obstructions, Logs, Debris .....   \_\_\_\_\_

Slides or Slumps .....   \_\_\_\_\_

Logboom or Debris barrier .....   \_\_\_\_\_

Adequate Erosion Protection .....   \_\_\_\_\_

Trees, Brush, Vegetation .....   \_\_\_\_\_

Other Deficiencies \_\_\_\_\_

**2) CHANNEL / DROP INLET CONTROL SECTION**

**Yes No Comment**

Concrete Structures:

Misalignment or Movement.....   \_\_\_\_\_

Cracking, spalling, deterioration.....   \_\_\_\_\_

Joint Separation or Cracking of Risers, Pipes.....   \_\_\_\_\_

Metal Corrosion.....   \_\_\_\_\_

Trees, Brush, Vegetation .....   \_\_\_\_\_

Earthen Channel Erosion .....   \_\_\_\_\_

Blockages or Obstructions.....   \_\_\_\_\_

Other Deficiencies or Observations: \_\_\_\_\_

**3) GATES, STOPLOGS, FLASHBOARDS:** \_\_\_\_\_

\_\_\_\_\_

(Controls, lifting mechanisms, leakage, corrosion, deterioration, operation)

<b>4) OPEN CHANNEL OR DISCHARGE CONDUIT</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
Misalignment or Movement .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Settlement.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Erosion Damage to Channel Floor, Sides.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Concrete: Cracking, spalling, deterioration .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Joint Separation or Deterioration in Pipes .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Metal Corrosion.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trees, Brush, Vegetation .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blockages or Obstructions.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies or Observations: _____			

<b>5) STILLING BASIN</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
Misalignment or Movement .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Settlement.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Erosion Damage to Channel Floor, Sides.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Undermining of Floor, Sides .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Scour of Downstream Channel.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Concrete: Cracking, spalling, deterioration .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trees, Brush, Vegetation .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blockages or Obstructions .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies or Observations: _____			

**C. Emergency Spillway (if applicable)**

<b>1) APPROACH CHANNEL</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
Obstructions, Logs, Debris .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Slides or Slumps .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Logboom or Debris barrier .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Adequate Erosion Protection .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trees, Brush, Vegetation.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies _____			

**2) CHANNEL CONTROL SECTION**

**Yes No Comment**

Concrete Structures:

Misalignment or Movement.....   \_\_\_\_\_

Cracking, spalling, deterioration.....   \_\_\_\_\_

Joint Separation of Pipes .....   \_\_\_\_\_

Metal Corrosion.....   \_\_\_\_\_

Trees, Brush, Vegetation .....   \_\_\_\_\_

Earthen Channel Erosion.....   \_\_\_\_\_

Blockages or Obstructions.....   \_\_\_\_\_

Other Deficiencies or Observations: \_\_\_\_\_

**3) OPEN CHANNEL OR DISCHARGE CONDUIT**

**Yes No Comment**

Misalignment or Movement .....   \_\_\_\_\_

Settlement.....   \_\_\_\_\_

Erosion Damage to Channel Floor, Sides .....   \_\_\_\_\_

Erosion Cut-off Walls.....   \_\_\_\_\_

Concrete: Cracking, spalling, deterioration .....   \_\_\_\_\_

Joint Separation or Deterioration in Pipes .....   \_\_\_\_\_

Metal Corrosion.....   \_\_\_\_\_

Trees, Brush, Vegetation .....   \_\_\_\_\_

Blockages or Obstructions .....   \_\_\_\_\_

Other Deficiencies or Observations: \_\_\_\_\_

**4) STILLING BASIN OR DS EROSION CONTROL**

**Yes No Comment**

Misalignment or Movement .....   \_\_\_\_\_

Settlement.....   \_\_\_\_\_

Erosion Damage to Channel Floor, Sides .....   \_\_\_\_\_

Undermining of Floor, Sides .....   \_\_\_\_\_

Scour of Downstream Channel .....   \_\_\_\_\_

Concrete: Cracking, spalling, deterioration .....   \_\_\_\_\_

Trees, Brush, Vegetation .....   \_\_\_\_\_

Blockages or Obstructions .....   \_\_\_\_\_

Other Deficiencies or Observations: \_\_\_\_\_

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## D. Outlet Works

### 1) Intake Structure (if visible)

**Yes**

**No Comment**

Obstructions, Logs, Debris .....   \_\_\_\_\_

Trashracks or Debris barrier .....   \_\_\_\_\_

Concrete: Cracking, spalling, deterioration .....   \_\_\_\_\_

Other Deficiencies: \_\_\_\_\_

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### 2) CONTROL GATE OR VALVE (if visible):

**Yes**

**No Comment**

Obstructions, Logs, Debris .....   \_\_\_\_\_

Metal Corrosion .....   \_\_\_\_\_

Leakage .....   \_\_\_\_\_

Cavitation Damage .....   \_\_\_\_\_

Other Deficiencies: \_\_\_\_\_

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### 3) DISCHARGE CONDUIT

**Yes**

**No Comment**

Misalignment or Movement .....   \_\_\_\_\_

Settlement .....   \_\_\_\_\_

Joint Leakage .....   \_\_\_\_\_

Joint Separation or Deterioration in Pipes .....   \_\_\_\_\_

Metal Corrosion .....   \_\_\_\_\_

Concrete: Cracking, spalling, deterioration .....   \_\_\_\_\_

Blockages or Obstructions .....   \_\_\_\_\_

Cavitation Damage .....   \_\_\_\_\_

Other Deficiencies or Observations: \_\_\_\_\_

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4) STILLING BASIN OR DS EROSION CONTROL	Yes	No	Comment
Misalignment or Movement.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Settlement .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Erosion Damage to Channel Floor, Sides .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Undermining of Floor, Sides.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Scour of Downstream Channel .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Concrete: Cracking, spalling, deterioration .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trees, Brush, Vegetation.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blockages or Obstructions .....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Deficiencies or Observations: _____			
_____			

5) GATE AND/OR VALVE CONTROLS: \_\_\_\_\_  
 \_\_\_\_\_

(Note: Type [mechanical or electrical], test operation results

E. MAINTENANCE DEFICIENCIES & COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**F. SKETCH OF DAM**

### III. DOWNSTREAM HAZARD

#### A. Hazard Classification

- 1) Estimated Dam Breach Peak Discharge (From Appendix A): \_\_\_\_\_ cfs
- 2) Estimated No. of Residences Affected by Dam Breach: \_\_\_\_\_
- 3) Other Development Affected: \_\_\_\_\_
- 4) Adequacy of Warning Time: \_\_\_\_\_
- 5) Downstream Hazard Classification: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### IV. STRUCTURAL DATA

#### A. Embankment/Barrier

- 1) Crest Elevation: \_\_\_\_\_
- 2) Crest Width: \_\_\_\_\_ 3) Crest Length: \_\_\_\_\_
- 4) Hydraulic Height: \_\_\_\_\_ 5) Structural Height: \_\_\_\_\_
- 6) Upstream Slope: \_\_\_\_\_ 7) Downstream Slope: \_\_\_\_\_
- 8) Embankment Material: \_\_\_\_\_
- 9) Foundation Material: \_\_\_\_\_
- 10) Abutment Material: \_\_\_\_\_

#### B. Principal/Service Spillway

- 1) Type/Material: \_\_\_\_\_
- 2) Location: \_\_\_\_\_
- 3) Control Section Dimensions: \_\_\_\_\_  
\_\_\_\_\_
- 4) Gates/Stoplogs: \_\_\_\_\_
- 5) Channel/Conduit Length/Dimensions: \_\_\_\_\_

#### C. Emergency Spillway

- 1) Type/Material: \_\_\_\_\_
- 2) Location: \_\_\_\_\_
- 3) Control Section Dimensions: \_\_\_\_\_
- 4) Gates/Stoplogs: \_\_\_\_\_

5) Channel/Conduit Length/Dimensions: \_\_\_\_\_

**D. Outlet Works**

1) Type/Material: \_\_\_\_\_

2) Location: \_\_\_\_\_

3) Conduit Diameter/Size \_\_\_\_\_

4) Entrance Structure Description: \_\_\_\_\_

5) Gate(s): (Type/Size) \_\_\_\_\_

6) Conduit Length: \_\_\_\_\_