**Dam Safety Inspection Checklist**

**Complete All Portions of This Section (Pre-inspection)**

Date of Inspection: __________________________ File Number: __________________________

Name of Dam: __________________________ EAP: (yes, no) OM&I: (yes, no)

**Review Inventory - Highlight missing information (Pre-inspection)**

Owner=s Name(s): __________________________

Address: __________________________ State: __________________________ Zip (+4): __________________________

Telephone (Home): __________________________ Telephone (Work): __________________________

Contact Person: __________________________ Telephone: __________________________

Designed By: __________________________

Constructed By: __________________________

Year Completed: __________________________ Plans Available (Yes, No) (location): __________________________

Purpose of dam: __________________________

**Interview with Owner (at the site):**

Owner/Representative present: (Yes, No) Name(s): __________________________

Double check address, telephone #, purpose (check ->) G

How long have you owned dam - previous name/owner? __________________________

EAP/OM&I: up-dated-(yes, no) & location: __________________________

Operate lake drain (times per year, accessibility): __________________________

Mowing (times per year): __________________________

Prior problems (wet areas, erosion, slides): __________________________

Repair or modification (what & when): __________________________

Failure/Incident/Breach (max. pool): __________________________

Downstream hazard status (recent changes): __________________________

Do you know the in-depth details of the construction of your dam? (If yes - ask next three questions, if no - go to Field Information Section)

Core trench material and location: __________________________

Volume of fill (earth or rock) in dam: __________________________

Foundation (earth or rock) of dam: __________________________

**Field Information (while at site)**

Pool Elevation (during inspection): __________________________ Time: __________________________ (a.m. p.m.)

Site Conditions(temp., weather, ground moisture): __________________________

Inspection Party: __________________________

Maximum Height: __________________________ (measured or inventory appears correct)

Normal Pool Surface Area: __________________________ (measured or inventory appears correct)
UPSTREAM SLOPE

Gradient: Horizontal: Vertical: (est, meas.)

☐ VEGETATION [no problem]
☐ Trees: Quantity: (<5, sparse, dense)
  Diameter: (<6", 6-12", >12")
  Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes:

☐ Brush: Quantity: (sparse, dense)
  Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes:

☐ Ground Cover: Type: (grass, crown vetch) Other:
  Quantity: (bare, sparse, adequate, dense)
  Appearance: (too tall, too short, good)
  Notes:

☐ SLOPE PROTECTION [no problem, could not inspect thoroughly]
☐ None

☐ Riprap: Average Diameter:
  (adequate, sparse, displaced, weathered, vegetation) (bedding/fabric noted - yes, no)
  Notes:

☐ Wave Berm:
  Vegetation: (adequate, bare, sparse, improper vegetation)
  Notes:

☐ Concrete Slabs: (cracked, settlement, undermined, voids, deteriorated, vegetation)
  Notes:

☐ Other:
  Notes:

☐ EROSION [no problem, could not inspect thoroughly]
☐ Wave Erosion (Beaching): Scarp: Length: Height:
  Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes:

☐ Runoff Erosion (Gullies):
  Quantity:
  Depth: Width: Length:
  Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes/Causes:

☐ INSTABILITIES [no problem, could not inspect thoroughly]
☐ Slides: Transverse Length: Longitudinal Length:
  Scarp: Width: Length:
  Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)
  Crack: Width: Depth:
  Notes/Causes:

☐ Cracks: ☐ Transverse ☐ Longitudinal ☐ Other
  Quantity:
  Length: Width: Depth:
  Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes/Causes:

(Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway, Lake Drain)
<table>
<thead>
<tr>
<th>Condition</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cracks</td>
<td>□ Transverse □ Longitudinal □ Other</td>
</tr>
<tr>
<td>Bulges □ Depressions □ Hummocky</td>
<td>Size: Height: Depth: Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg) Notes/Causes:</td>
</tr>
<tr>
<td>Bulges □ Depressions □ Hummocky</td>
<td>Size: Height: Depth: Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg) Notes/Causes:</td>
</tr>
<tr>
<td>OTHER [no problem, could not inspect thoroughly]</td>
<td>□ Rodent Burrows: (few, numerous) Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg) Notes:</td>
</tr>
<tr>
<td>Ruts</td>
<td>Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg) Depth: Width: Length: Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian)</td>
</tr>
<tr>
<td>Other</td>
<td>Notes:</td>
</tr>
</tbody>
</table>

**CREST** Length: Width: (est, meas.)

**VEGETATION** [no problem]

<table>
<thead>
<tr>
<th>Vegetation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td>Quantity: (&lt;5, sparse, dense) Diameter: (&lt;6&quot;, 6-12&quot;, &gt;12&quot;) Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg) Notes:</td>
</tr>
<tr>
<td>Brush</td>
<td>Quantity: (sparse, dense) Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg) Notes:</td>
</tr>
<tr>
<td>Ground Cover</td>
<td>Type: (grass, crown vetch) Other: Quantity: (bare, sparse, adequate, dense) Appearance: (too tall, too short, good) Notes:</td>
</tr>
</tbody>
</table>

**EROSION** [no problem, could not inspect thoroughly]

<table>
<thead>
<tr>
<th>Erosion</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runoff Erosion (Gullies): Quantity:</td>
<td>Depth: Width: Length: Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg) Notes/Causes:</td>
</tr>
</tbody>
</table>
**ALIGNMENT**  [no problem, could not inspect thoroughly]

- Vertical:  □ Low Area:
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Elevation Difference:  
  - Length:  
  - Notes/Causes:

- Horizontal:  
  - Notes/Causes:

**WIDTH**  [no problem]

- Too Narrow
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Notes/Causes:

**INSTABILITIES**  [no problem, could not inspect thoroughly]

- Cracks:
  - □ Transverse  □ Longitudinal  □ Other
  - Quantity:  
  - Length:  
  - Width:  
  - Depth:  
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Notes/Causes:

- Cracks:
  - □ Transverse  □ Longitudinal  □ Other
  - Quantity:  
  - Length:  
  - Width:  
  - Depth:  
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Notes/Causes:

- Bulges
  - □ Depressions  □ Hummocky
  - Size:  
  - Height:  
  - Depth:  
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Notes/Causes:

- Bulges
  - □ Depressions  □ Hummocky
  - Size:  
  - Height:  
  - Depth:  
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Notes/Causes:

**OTHER**  [no problem, could not inspect thoroughly]

- Rodent Burrows: (few, numerous)
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Notes:

- Ruts:
  - Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg)
  - Width:  
  - Length:  
  - Depth:  
  - Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian):

- Other:
  - Notes:  

---

{Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway, Lake Drain}
DOWNSTREAM SLOPE  Gradient:  Horizontal:  Vertical:  (est, meas.)

☐ VEGETATION  [no problem]
☐ Trees:  Quantity:  (<5, sparse, dense)
  Diameter:  (<6”,  6-12”,  >12”)
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes:

☐ Brush:  Quantity:  (sparse, dense)
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes:

☐ Ground Cover:  Type:  (grass, crown vetch)  Other:
  Quantity:  (bare, sparse, adequate, dense)
  Appearance:  (too tall, too short, good)
  Notes:

☐ EROSION  [no problem, could not inspect thoroughly]
☐ Runoff Erosion (Gullies):  Quantity:  Depth:  Width:  Length:
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes/Causes:

☐ INSTABILITIES  [no problem, could not inspect thoroughly]
☐ Slides:  Transverse Length:  Longitudinal Length:
  Scarp:  Width:  Length:
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Crack:  Width:  Depth:
  Notes/Causes:

☐ Cracks:  ☐ Transverse  ☐ Longitudinal  ☐ Other
  Quantity:  Length:  Width:  Depth:
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes/Causes:

☐ Cracks:  ☐ Transverse  ☐ Longitudinal  ☐ Other
  Quantity:  Length:  Width:  Depth:
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes/Causes:

☐ Bulges  ☐ Depressions  ☐ Hummocky
  Size:  Height:  Depth:
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes/Causes:

☐ Bulges  ☐ Depressions  ☐ Hummocky
  Size:  Height:  Depth:
  Location:  (adj, to structure, entire slope, lt end, rt end, middle, see dwg)
  Notes/Causes:

[Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway, Lake Drain]
Monitor Maintenance Engineer

**OTHER**  [no problem, could not inspect thoroughly]
- Rodent Burrows: (few, numerous)  
  - Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)  
  - Notes:
- Ruts:  
  - Location: (adj. to structure, entire slope, lt end, rt end, middle, see dwg)  
  - Depth:  
  - Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian):
- Other:
  - Notes:

---

**SEEPAGE**  [no problem, could not inspect thoroughly]
- Wet Area  
- Flow  
- Boil  
- Sinkhole  
  - Flow Rate:  
  - Size:  
  - Location:
    - Aquatic Vegetation  
    - Rust Colored Deposits  
    - Sediment in Flow  
    - Other:
  - Notes/Causes:

---

**EMBANKMENT DRAINS**  [none, none found, no problem, could not inspect thoroughly]
- Type:  
  - Toe Drain  
  - Relief Wells  
  - Other:  
  - Flow Rate:  
  - Size:  
  - Number:  
  - Location:
  - Notes:

---

**MONITORING INSTRUMENTATION**  [none, none found, no problem, could not inspect thoroughly]
- None Found  
- Piezometers  
- Weirs/Flumes  
- Other  
- Periodic Inspections by:  
  - Notes:

{Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway, Lake Drain}
PRINCIPAL SPILLWAY

☐ GENERAL INLET  [no problem, could not inspect thoroughly]
  ☐ Anti-Vortex Plate [None]  Dimensions:
    (adequate, too small,)
    Type: (steel, concrete, aluminum, stainless steel, corrugated metal wood, other):
    Deterioration: (missing sections, rusted, collapsed)
    Notes:

  ☐ Flash Boards [None]
    Type: (metal, wood):
    Deterioration:
    Notes:

  ☐ Trashrack [None]  Opening Size: (adequate, too small, too large)
    Type: (metal bars, fence, screen, concrete, baffle, other):
    Deterioration: (broken bars, missing sections, rusted, collapsed)
    Notes:

☐ INLET OBSTRUCTION  [no problem, could not inspect thoroughly]
  ☐ Debris: (leaves, trash, logs, branches, ice)

  ☐ Trees:  Quantity: (<5, sparse, dense)
    Diameter: (<6", 6-12", >12")
    Location: (entire inlet, lt side, rt side, middle, see dwg)
    Notes:

  ☐ Brush:  Quantity: (sparse, dense)
    Location: (entire inlet, lt side, rt side, middle, see dwg)
    Notes:

  ☐ Other: (beaver activity, trashrack opening too small, partially/completely blocked, i.e.)
    Notes:

☐ INLET MATERIALS  [no problem, could not inspect thoroughly]
  ☐ Metal
    (loss of coating/paint, surface rust, corrosion (pitting, scaling), rusted out, pipe deformation )
    Dimensions:
    Location:
    Notes/Causes:

  ☐ Concrete
    (bug holes, hairline crack, efflorescence)
    (spalling, popouts, honeycombing, scaling, craze/map cracks)
    (isolated crack, exposed rebar, disintegarion, other)
    Dimensions/Location:
    Notes/Causes:

    (bug holes, hairline crack, efflorescence)
    (spalling, popouts, honeycombing, scaling, craze/map cracks)
    (isolated crack, exposed rebar, disintegarion, other)
    Dimensions/Location:
    Notes/Causes:

  ☐ Plastic
    (deterioration, cracking, deformation )
    Dimensions:
    Location:
    Notes/Causes:

  {Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway-Inlet, Emergency Spillway, Lake Drain}
<table>
<thead>
<tr>
<th>Earthen</th>
<th>Ground Cover: Type: (grass, crown vetch) Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity: (bare, sparse, adequate, dense)</td>
</tr>
<tr>
<td></td>
<td>Appearance: (too tall, too short, good)</td>
</tr>
<tr>
<td></td>
<td>Notes:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Erosion: (wave, surface runoff)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description (height/depth/length/etc):</td>
</tr>
<tr>
<td>Notes:</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Ruts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: (entire inlet, lt side, rt side, middle, see dwg)</td>
</tr>
<tr>
<td>Depth: Width: Length:</td>
</tr>
<tr>
<td>Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Riprap: Average Diameter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(adequate, sparse, displaced, weathered, vegetation) (bedding/fabric noted - yes, no)</td>
</tr>
<tr>
<td>Notes:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Rock-Cut (weathered, erosion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
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<tr>
<td>Notes:</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Other:</th>
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<tbody>
<tr>
<td>Notes:</td>
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</table>

<table>
<thead>
<tr>
<th>OTHER INLET PROBLEMS</th>
<th>[no problem, could not inspect thoroughly]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mis-Alignment: (pipe, chute, sidewall, headwall)</td>
<td></td>
</tr>
<tr>
<td>Location/Description:</td>
<td></td>
</tr>
<tr>
<td>Notes/Causes:</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Separated Joint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location/Description:</td>
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<tr>
<td>Notes/Causes:</td>
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<table>
<thead>
<tr>
<th>Undermining:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location/Description:</td>
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<tr>
<td>Notes/Causes:</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Other:</th>
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<tbody>
<tr>
<td>Notes:</td>
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</table>

<table>
<thead>
<tr>
<th>OPEN CHANNEL CONTROL SECTION</th>
<th>[no problem, could not inspect]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (est., ms.) Brdh (est., ms.)</td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTLET OBSTRUCTION</th>
<th>[no problem, could not inspect thoroughly]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debris: (leaves, trash, logs, branches, ice)</td>
<td></td>
</tr>
<tr>
<td>Trees: Quantity: (&lt;5, sparse, dense)</td>
<td></td>
</tr>
<tr>
<td>Diameter: (&lt;6&quot;, 6-12&quot;, &gt;12&quot;)</td>
<td></td>
</tr>
<tr>
<td>Location: (entire outlet, lt side, rt side, middle, see dwg)</td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
</tr>
</tbody>
</table>

| Brush: Quantity: (sparse, dense) |
| Location: (entire outlet, lt side, rt side, middle, see dwg) |
| Notes: |

| Other: (beaver activity, partially/completely blocked, i.e.) |
| Notes: |

[Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway-Inlet/Outlet, Emergency Spillway, Lake Drain]
[OUTLET MATERIALS] [no problem, could not inspect thoroughly]

- **Metal**  
  (loss of coating/paint, surface rust, corrosion (pitting, scaling), rusted out, pipe deformation)  
  Location:  
  Notes/Causes:

- **Concrete**  
  (bug holes, hairline crack, efflorescence)  
  (spalling, popouts, honeycomb, scaling, craze/map cracks)  
  (isolated crack, exposed rebar, disintegration, other)  
  Dimensions/Location:  
  Notes/Causes:

- **Plastic**  
  (deterioration, cracking, deformation)  
  Dimensions:  
  Location:  
  Notes/Causes:

- **Earthen**  
  Ground Cover: **Type**: (grass, crown vetch) **Other**:  
  Quantity: (bare, sparse, adequate, dense)  
  Appearance: (too tall, too short, good)  
  Notes:

- **Erosion**: (other, surface runoff)  
  Description (width/depth/length/etc):  
  Notes:

- **Ruts**  
  Location: (entire inlet, lt side, rt side, middle, see dwg)  
  Depth:  
  Width:  
  Length:  
  Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian):

- **Riprap**:  
  Average Diameter:  
  (adequate, sparse, displaced, weathered, vegetation) (bedding/fabric noted - yes, no)  
  Notes:

- **Rock-Cut** (weathered, erosion)  
  Description/Notes:

- **Other**:

[OTHER OUTLET PROBLEMS] [no problem, could not inspect thoroughly]

- **Mis-Alignment**: (pipe, chute, sidewall, headwall)  
  □ **Pipe Deformation**  
  Location/Description:  
  Notes/Causes:

- **Separated Joint**  
  □ **Loss of Joint Material**  
  Location/Description:  
  Notes/Causes:

- **Undermining**  
  Location/Description:  
  Notes/Causes:

- **Other**:

[Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway-Outlet, Emergency Spillway, Lake Drain]
OUTLET EROSION CONTROL STRUCTURE  (Still in Basins)

□ None
□ (endwall/headwall, plunge pool, impact basin, flip bucket, USBR, baffled chute, rock lined channel)

Notes:

Components (baffle blocks, chute blocks, end sill)

□ MATERIAL  [no problem, could not inspect thoroughly]
□ Riprap:  Average Diameter:  
(sparse, displaced, weathered, vegetation)  (bedding/fabric noted - yes, no)

Notes:

□ Concrete

(bug holes, hairline crack, efflorescence)

(spalling, popouts, honeycombing, scaling, craze/map cracks)

(isolated crack, exposed rebar, disintegration, other)

Dimensions/Location:

Notes/Causes:

□ OTHER  [no problem, could not inspect thoroughly]

□ Mis-Alignment: (sidewall, headwall, entire struct.)

Location:

Description:

Notes/Causes:

□ Separated Joint  □ Loss of Joint Material

Location:

Description:

Notes/Causes:

□ Undermining:

Location:

Description:

Notes/Causes:

□ Other:

Notes:

□ DRAINS  [none, none found, no problem, could not inspect thoroughly]  (See SEEPAGE Section for Toe Drains & Relief Wells)

Type:  □ Weep Holes  □ Relief Drains  □ Other: ____________

Flow Rate:  Size:  Number:

Location:

Notes:

□ Weep Holes  □ Relief Drains  □ Other: ____________

Flow Rate:  Size:  Number:

Location:

Notes:

(Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway-Outlet Erosion Control Structure, Emergency Spillway, Lake Drain)
**EMERGENCY SPILLWAY**

- None Found

**GENERAL INLET** [no problem, could not inspect thoroughly]

- Anti-Vortex Plate [None]
  - Dimensions: _ (adequate, too small, too large)_
  - Type: (steel, concrete, aluminum, stainless steel, corrugated metal wood, other):
  - Deterioration: (missing sections, rusted, collapsed)
  - Notes:

- Flash Boards [None]
  - Type: (metal, wood):
  - Deterioration:
  - Notes:

- Trashrack [None]
  - Opening Size: _ (adequate, too small, too large)_
  - Type: (metal bars, fence, screen, concrete, baffle, other):
  - Deterioration: (broken bars, missing sections, rusted, collapsed)
  - Notes:

**INLET OBSTRUCTION** [no problem, could not inspect thoroughly]

- Debris: (leaves, trash, logs, branches, ice)
  - Type: (metal, wood):
  - Deterioration:
  - Notes:

- Trees: Quantity: (<5, sparse, dense)
  - Diameter: (<6", 6-12", >12")
  - Location: (entire inlet, lt side, rt side, middle, see dwg)
  - Notes:

- Brush: Quantity: (sparse, dense)
  - Location: (entire inlet, lt side, rt side, middle, see dwg)
  - Notes:

- Other: (beaver activity, trashrack opening too small, partially/completely blocked, i.e.)
  - Notes:

**INLET MATERIALS** [no problem, could not inspect thoroughly]

- Metal
  - (loss of coating/paint, surface rust, corrosion (pitting, scaling), rusted out, pipe deformation )
  - Dimensions/Location:
  - Notes/Causes:

- Concrete
  - (bug holes, hairline crack, efflorescence)
  - (spalling, popouts, honeycombing, scaling, craze/map cracks)
  - (isolated crack, exposed rebar, disintegration, other)
  - Dimensions/Location:
  - Notes/Causes:

- Plastic
  - (deterioration, cracking, deformation )
  - Dimensions/Location:
  - Notes/Causes:

[Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, **Emergency Spillway-Inlet**, Lake Drain]
Earthen

Ground Cover: Type: (grass, crown vetch) Other:
  Quantity: (bare, sparse, adequate, dense)
  Appearance: (too tall, too short, good)
  Notes:

Erosion: (wave, surface runoff)
  Description (height/depth/length/etc):
  Notes:

Ruts:
  Location: (entire inlet, lt side, rt side, middle, see dwg)
  Depth:  Width:  Length:
  Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian):

Riprap: Average Diameter:
  (adequate, sparse, displaced, weathered, vegetation) (bedding/fabric noted · yes, no)
  Notes:

Rock-Cut (weathered, erosion)
  Description:
  Notes:

Other:

OTHER INLET PROBLEMS  [no problem, could not inspect thoroughly]
  Mis-Alignment: (channel, chute, sidewall, headwall)   Pipe Deformation
  Location/Description:
  Notes/Causes:

Separated Joint  Loss of Joint Material
  Location/Description:
  Notes/Causes:

Undermining:
  Location/Description:
  Notes/Causes:

Other:

OPEN CHANNEL CONTROL SECTION  [no problem, could not inspect]
  Width (est., ms.)  Brdth (est., ms.)
  Notes:

OUTLET OBSTRUCTION  [no problem, could not inspect thoroughly]
  Debris: (leaves, trash, logs, branches, ice)
  Trees: Quantity: (<5, sparse, dense)
    Diameter: (<6", 6-12", >12")
    Location: (entire outlet, lt side, rt side, middle, see dwg)
    Notes:

  Brush: Quantity: (sparse, dense)
    Location: (entire outlet, lt side, rt side, middle, see dwg)
    Notes:

  Other: (beaver activity, partially/completely blocked, i.e.)
  Notes:

[Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway-Inlet/Outlet, Lake Drain]
**OUTLET MATERIALS**  [no problem, could not inspect thoroughly]

- **Metal**  (loss of coating/paint, surface rust, corrosion (pitting, scaling), rusted out, pipe deformation )
  - Dimensions:
  - Location:
  - Notes/Causes:

- **Concrete**  (bug holes, hairline crack, efflorescence)
  - (spalling, popouts, honeycombing, scaling, craze/map cracks)
  - (isolated crack, exposed rebar, disintegration, other)
  - Dimensions/Location:
  - Notes/Causes:

- **Plastic**  (deterioration, cracking, deformation )
  - Dimensions:
  - Location:
  - Notes/Causes:

- **Earthen**
  - **Ground Cover:**  Type: (grass, crown vetch)  Other:
    - Quantity: (bare, sparse, adequate, dense)
    - Appearance: (too tall, too short, good)
    - Notes:

- **Erosion:**  (other, surface runoff)
  - Description (width/depth/length/etc):
  - Notes:

- **Ruts:**
  - Location: (entire inlet, lt side, rt side, middle, see dwg)
  - Depth:
  - Width:
  - Length:
  - Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian):

- **Riprap:**  Average Diameter:
  - (adequate, sparse, displaced, weathered, vegetation) (bedding/fabric noted - yes, no)
  - Notes:

- **Rock-Cut**  (weathered, erosion)
  - Description:
  - Notes:

- **Other:**
  - 

**OTHER OUTLET PROBLEMS**  [no problem, could not inspect thoroughly]

- **Mis-Alignment:** (channel, chute, sidewall, headwall)  **Pipe Deformation**
  - Location/Description:
  - Notes/Causes:

- **Separated Joint**  **Loss of Joint Material**
  - Location/Description:
  - Notes/Causes:

- **Undermining:**
  - Location/Description:
  - Notes/Causes:

- **Other:**
  - 

[Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway-Outlet, Lake Drain]
# OUTLET EROSION CONTROL STRUCTURE

(Stilling Basins)

- None
- (endwall/headwall, plunge pool, impact basin, flip bucket, USBR, baffled chute, rock lined channel)
  
  Notes:

  Components (baffle blocks, chute blocks, endsill)

- MATERIAL  [no problem, could not inspect thoroughly]
  
  - Riprap: Average Diameter:
    - (adequate, sparse, displaced, weathered, vegetation) (bedding/fabric noted - yes, no)
  
  Notes:

- Concrete
  
  - (bug holes, hairline crack, efflorescence)
  - (spalling, popouts, honeycombing, scaling, craze/map cracks)
  - (isolated crack, exposed rebar, disintegration, other)
  
  Dimensions/Location:
  
  Notes/Causes:

- OTHER  [no problem, could not inspect thoroughly]
  
  - Mis-Alignment:( sidewall, headwall)
  
  Location:
  
  Description:
  
  Notes/Causes:

- Separated Joint  [no problem, could not inspect thoroughly]
  
  - Loss of Joint Material
  
  Location:
  
  Description:
  
  Notes/Causes:

- Undermining:
  
  Location:
  
  Description:
  
  Notes/Causes:

- Other:
  
  Notes:

- DRAINS  [none, none found, no problem, could not inspect thoroughly]
  
  (See SEEPAGE Section for Toe Drains & Relief Wells)

  Type:  
  - Weep Holes
  - Relief Drains
  - Other:

  Flow Rate:
  
  Size:
  
  Number:

  Location:
  
  Notes:

(Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway-Outlet Erosion Control Structure, Lake Drain)
LAKE DRAIN

☐ **GENERAL**
- ☐ None Found
- ☐ Does not have one
- ☐ Type of Lake Drain (isolated control/intake tower, valve vault w/ outlet conduit, valve in riser/drop inlet, siphon)
  Notes:
- ☐ Operated During Inspection (yes, no)
  Notes:

☐ **ACCESS TO VALVE/SLUCIE GATE** [no problem, could not inspect thoroughly]
- ☐ Type (not accessible, from shore, boat, walkway, other)
  Notes:
- ☐ Walkway/Platform:
  ☐ Concrete Deterioration ☐ Cracks (platform, piers, end supports, railing)
    Location:
    Notes:
  ☐ Wood Deterioration
    Notes:
  ☐ Metal Deterioration (minor, moderate, extensive, other)
    Notes:

☐ **LAKE DRAIN COMPONENTS** [no problem, could not inspect thoroughly]
- ☐ Concrete Structure
  Location:
  Description: (deterioration, misalignment, cracks):
  Notes/Causes:
- ☐ Valve Control (Operating Device)
  ☐ No Operating Device ☐ No Stem ☐ Bent/Broken Stem ☐ Other
  Notes/Operability:
- ☐ Valve / Sluice Gate
  ☐ Metal Deterioration: (surface rust, minor, moderate, extensive, other)
    Location:
    Flow Rate:
    Notes/Causes:
  ☐ Misalignment
    Notes/Causes:
- ☐ Leakage - Flow Rate:
  Notes/Causes:
- ☐ Valve / Sluice Gate
  ☐ Metal Deterioration: (surface rust, minor, moderate, extensive, other)
    Location:
    Flow Rate:
    Notes/Causes:
  ☐ Misalignment - Notes/Causes:
- ☐ Leakage - Flow Rate:
  Notes/Causes:
Outlet Conduit

- **Metal:** (loss of coating/paint, surface rust, corrosion (pitting, scaling), rusted out)
  - Location:
  - Notes/Causes:

- **Concrete:** (bug holes, hairline crack, efflorescence)
  - Location:
  - Notes/Causes:
  - (spalling, popouts, honeycombing, scaling, craze/map cracks)
  - Dimensions/Location:
  - Notes/Causes:
  - (isolated crack, exposed rebar, disintegration, other)

- **Plastic:** (deterioration, cracking)
  - Location:
  - Notes/Causes:

- **Conduit Deformation**
  - Location:
  - Notes/Causes:

- **Separated Joint**
  - Location/Description:
  - Notes/Causes:

- **Undermining**
  - Location/Description:
  - Notes/Causes:

- **Vegetation:** (trees, brush)
  - Location:
  - Notes:

- **Other:**
  - Location:
  - Notes:

- **Energy Dissipator**
  - **Type:** (endwall, plunge pool, impact basin, stilling basin, rock-lined channel, none)
  - Notes:

  - **Riprap:** Average Diameter:
    - (adequate, sparse, displaced, weathered, vegetation) (bedding/fabric noted - yes, no)
    - Notes:

  - **Concrete:** (bug holes, hairline crack, efflorescence)
    - Location:
    - Notes/Causes:
    - (spalling, popouts, honeycombing, scaling, craze/map cracks)
    - Dimensions/Location:
    - Notes/Causes:
    - (isolated crack, exposed rebar, disintegration, other)

- **Mis-Alignment**
  - Location/Description:
  - Notes/Causes:

- **Separated Joint**
  - Location/Description:
  - Notes/Causes:

- **Undermining**
  - Location/Description:
  - Notes/Causes:

- **Other:**
  - Notes:

[Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, Emergency Spillway, Lake Drain]
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Dam Inspection Survey Notes
### DAM CLASSIFICATION CHECKLIST

<table>
<thead>
<tr>
<th>Name of Dam:</th>
<th>File Number:</th>
<th>Permit Number:</th>
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<tbody>
<tr>
<td>County:</td>
<td>Date:</td>
<td>Engineer:</td>
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### HEIGHT
- Height of dam as measured = _____ feet
- Storage volume at top of dam = _________ acre-feet

- **□ >60'** - Class I
- **□ >40'** - Class II
- **□ >25'** - Class III
- **□ ≤25'** - Class IV

### STORAGE EXEMPT
- **□ >5000 acre-feet** - Class I
- **□ > 500 acre-feet** - Class II
- **□ > 50 acre-feet** - Class III
- **□ ≤ 50 acre-feet** - Class IV

### POTENTIAL DOWNSTREAM HAZARD

<table>
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<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>X</th>
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- **Loss of life (plausible circumstances envisioned to cause loss of life):**
- **Loss of high-value property (flooding of homes & business, damage to Class I, II & III dams):**
- **Damage to railroads or public utilities:**
- **Damage to local roads (county & township):**
- **Losses restricted mainly to the dam and agricultural/rural:**
- **Distance downstream from dam to affected structure (feet):**
- **Vertical distance from streambed to base of affected structure (feet):**
- **Horizontal distance from stream to affected structure (feet):**

### Final Class:
- **□ Exempt**
- **□ I**
- **□ II**
- **□ III**
- **□ IV**

### Estimated Population at Risk __________

**Height Class _____  Storage Class _____  Hazard Class _____**

**Final Class:** Exempt I II III IV (circle one)  Class Changed (Yes, No)