Dam Safety Inspection Checklist

Complete All Portions of This Section (Pre-inspection)
Date of Inspection:
Name of Dam: File Number:
EAP: (yes, no) OM&I: (yes, no)

Review Inventory - Highlight missing information (Pre -inspection)
Owner=s Name(s):
Address:
City: 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)

Required Action

None Monitor Maintenance Engineer

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:_____

None Monitor Maintenance Engineer

Required Action

Required Action

None Monitor Maintenance Engineer

☐ 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: _____

☐ ***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: _____ Width: _____ Length: _____
Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian) _____

☐ Other: _____ ☐ ☐ ☐ ☐
Notes: _____

CREST

Length: _____ Width: _____ (est, meas.)

☐ ***VEGETATION*** [no problem]

☐ Trees: Quantity: (<5, sparse, dense) ☐ ☐ ☐ ☐
Diameter: (<6", 6-12", >12") _____
Location: (adj. to structure, entire crest, lt end, rt end, middle, see dwg) _____
Notes: _____

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

None Monitor Maintenance Engineer

Required Action

Required Action

None Monitor Maintenance Engineer

☐ ***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) _____

Depth: _____ Width: _____ Length: _____

Notes/Causes: (truck/auto, motorcycle, ATV, animals, pedestrian) _____

☐ Other: ☐ ☐ ☐ ☐

Notes: _____

None Monitor Maintenance Engineer

Required Action

Required Action

DOWNSTREAM SLOPE Gradient: Horizontal:_____ Vertical:_____(est, meas.)

None Monitor Maintenance Engineer

☐ ***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:_____

None Monitor Maintenance Engineer

Required Action

Required Action

None 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: Width: Length:

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 ☐ None

☐ Rust Colored Deposits ☐ None

☐ Sediment in Flow ☐ None

☐ Other:

Notes/Causes:

☐ Wet Area ☐ Flow ☐ Boil ☐ Sinkhole ☐ ☐ ☐ ☐

Flow Rate Size:

Location:

☐ Aquatic Vegetation ☐ None

☐ Rust Colored Deposits ☐ None

☐ Sediment in Flow ☐ None

☐ 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:

None Monitor Maintenance Engineer

Required Action

PRINCIPAL SPILLWAY

Required Action: None | Monitor | Maintenance | Engineer

☐ ***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, disintegration, other)_____ ☐ ☐ ☐ ☐
Dimensions/Location:_____
Notes/Causes:_____

(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:_____

Required Action: None | Monitor | Maintenance | Engineer

Required Action

None Monitor Maintenance Engineer

☐ 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:(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: ☐ ☐ ☐ ☐

☐ ***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:

Required Action

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

Notes:

None Monitor Maintenance Engineer

Required Action

☐ ***OUTLET MATERIALS*** [no problem, could not inspect thoroughly]

None Monitor Maintenance Engineer

☐ 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:

(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:(pipe, chute, sidewall, headwall) ☐ Pipe Deformation ☐ ☐ ☐ ☐
Location/Description:
Notes/Causes:

None Monitor Maintenance Engineer

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

☐ Undermining: ☐ ☐ ☐ ☐
Location/Description:
Notes/Causes:

☐ Other: ☐ ☐ ☐ ☐

Required Action

Required Action

None Monitor Maintenance Engineer

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:

(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: ☐ ☐ ☐ ☐

☐ ***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:

Type: ☐ Weep Holes ☐ Relief Drains ☐ Other: ☐ ☐ ☐ ☐

Flow Rate: Size: Number:

Location:

Notes:

None Monitor Maintenance Engineer

Required Action

EMERGENCY SPILLWAY

Required Action: None | Monitor | Maint. | Engineer

☐ None Found ☐ ☐ ☐ ☐

☐ ***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, disintegration, other)_____ ☐ ☐ ☐ ☐
Dimensions/Location:_____
Notes/Causes:_____

(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:_____

None | Monitor | Maintenance | Engineer
Required Action

Required Action

None Monitor Maintenance Engineer

☐ 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:

Required Action

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

Notes:

None Monitor Maintenance Engineer

{Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, **Emergency Spillway-Inlet/Outlet**, Lake Drain}

Required Action — None | Monitor | Maint. | Engineer

☐ ***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:

(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:

Required Action — None | Monitor | Maintenance | Engineer

☐ 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}

Required Action

Required Action

None Monitor Maint. Engineer

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:

(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 ☐ Loss of Joint Material ☐ ☐ ☐ ☐

Location:

Description:

Notes/Causes:

☐ Undermining: ☐ ☐ ☐ ☐

Location:

Description:

Notes/Causes:

☐ Other: ☐ ☐ ☐ ☐

☐ ***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:

Type: ☐ Weep Holes ☐ Relief Drains ☐ Other: ☐ ☐ ☐ ☐

Flow Rate: Size: Number:

Location:

Notes:

None Monitor Maintenance Engineer

Required Action

{Upstream Slope, Crest, Downstream Slope, Seepage, Principal Spillway, **Emergency Spillway-Outlet Erosion Control Structure**, Lake Drain}

LAKE DRAIN

Required Action — None | Monitor | Maint. | Engineer

☐ ***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/SLUICE 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:

Required Action — None | Monitor | Maintenance | Engineer

Required Action

None Monitor Maintenance Engineer

☐ Outlet Conduit

☐ Metal:(loss of coating/paint, surface rust, corrosion (pitting, scaling), rusted out) ☐ ☐ ☐ ☐

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) ☐ ☐ ☐ ☐

Location:

Notes/Causes:

☐ Conduit Deformation ☐ Mis-Alignment: ☐ ☐ ☐ ☐

Location:

Notes/Causes:

☐ Separated Joint ☐ Loss of Joint Material ☐ ☐ ☐ ☐

Location/Description:

Notes/Causes:

☐ Undermining: ☐ ☐ ☐ ☐

Location/Description:

Notes/Causes:

☐ Vegetation (trees, brush) ☐ ☐ ☐ ☐

Notes:

☐ Other: ☐ ☐ ☐ ☐

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) ☐ ☐ ☐ ☐

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

(isolated crack, exposed rebar, disintegration, other) ☐ ☐ ☐ ☐

Dimensions/Location:

Notes/Causes:

☐ Mis-Alignment: ☐ ☐ ☐ ☐

Location/Description:

Notes/Causes:

☐ Separated Joint ☐ Loss of Joint Material ☐ ☐ ☐ ☐

Location/Description:

Notes/Causes:

☐ Undermining: ☐ ☐ ☐ ☐

Location/Description:

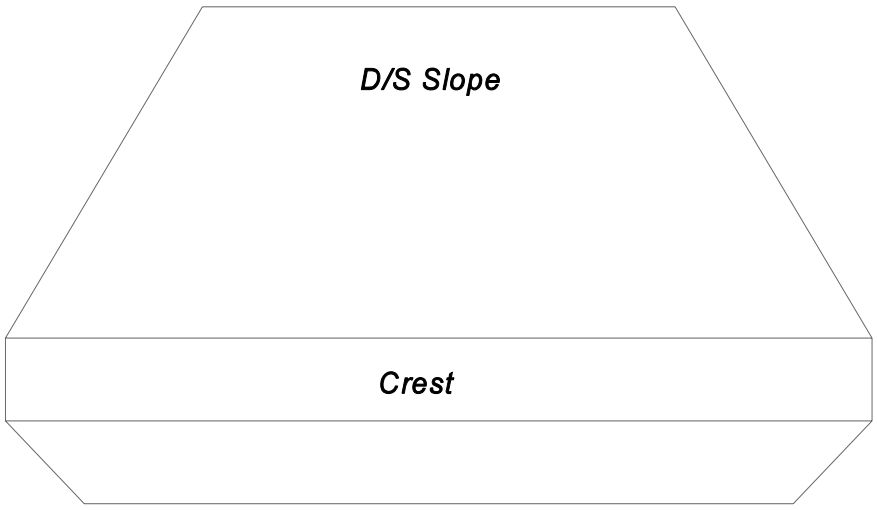
Notes/Causes:

Required Action

☐ Other: ☐ ☐ ☐ ☐

Notes:

None Monitor Maintenance Engineer



Name of Dam	Inspector	Date

Name of Project:
File Number:
Date:

Transit:
Rod:
Other:

Sta.	BS	HI	FS	Elev.	Description

Dam Inspection Survey Notes

DAM CLASSIFICATION CHECKLIST

Name of Dam:_____ **File Number:**_____ **Permit Number:**_____

County:_____ **Date:**_____ **Engineer:**_____

HEIGHT

Height of dam as measured =_____feet

□ >60' - Class I

□ >40' - Class II

□ >25' - Class III

□ ≤25' - Class IV

STORAGE

Storage volume at top of dam =_____acre-feet

□ >5000 acre-feet - Class I

□ > 500 acre-feet - Class II

□ > 50 acre-feet - Class III

□ ≤ 50 acre-feet - Class IV

EXEMPT

□ Height ≤ 6 feet

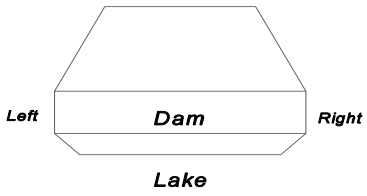
□ Storage ≤ 15 acre-feet

□ 6 feet < Height < 10 feet & Volume < 50 acre-feet

POTENTIAL DOWNSTREAM HAZARD

I	II				III		IV	X			
Loss of human life (plausible circumstances envisioned to cause loss of life)	A possible health hazard (loss of public water, wastewater treatment facility)	Loss of high-value property (flooding of homes & business, damage to Class I, II & III dams)	Damage to interstates & state routes and only access to homes/critical facilities	Damage to railroads or public utilities	Damage rural bldgs. & not otherwise high-valued property, Class IV dams/levees	Damage to local roads (county & township)	Losses restricted mainly to the dam and agricultural/rural	No hazard to structure noted	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)

Sketch in Developments Downstream of Dam



Estimated Population at Risk ____

Height Class _____ Storage Class _____ Hazard Class _____

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