Dam Owner Annual Inspection Form
Earthen Dams

Project Data

Dam Name: Lake Kayak Dam	
County: Snohomish	State Dam No. SN07-0199
Owner Name: Mountain View Park Community Club	
Owner Address: MVPCC PO Box 926 Duvall, WA 98019	Telephone No.: N/A E-mail address: info.mvpcc@gmail.com
Inspected by: Andy Quast, Kacie Ciske, Audrey Spence, Molly Graham, Doug Linman	
Inspection Date: October 2, 2022	Weather: Dry, Clear weather

Directions

- During inspection, check all boxes that apply. Fill in the overall condition of each structure and what actions will be taken to remedy any issues found. Mail or email a copy of the completed form to the Dam Safety Office.
- Mark approximate location of any problems on plan 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 5 feet below dam crest

Reservoir Outflow at time of inspection 0 cfs or _____ gpm

Condition of Dam (embankment, abutments, foundation)

Dam crest Check all that apply:

☐ low areas ☐ surface cracking ☐ animal burrows ☐ brush
☐ horizontal misalignment ☐ ruts ☐ trees

Overall condition: Good

Actions needed: Monitor and maintain

Upstream face Check all that apply:

☐ slumps ☐ sinkholes ☐ animal burrows
☐ slides ☐ slope protection ☐ trees
☐ scarps ☐ wave erosion ☒ brush

Overall condition: Good – cat tail/reed growth in shallow water at lake edge, unable to cut growth as plants are growing in the water

Actions needed: Monitor and maintain

Condition of Dam Cont. (embankment, abutments, foundation)

Downstream face and toe Check all that apply:

☐ wet or soft areas	☐ scarps	☐ erosion	☐ water-loving vegetation
☐ slumps	☐ sinkholes	☐ unusual movement	☐ trees
☐ slides	☐ change in slope	☒ animal burrows	☐ brush

Is there seepage? ☐ Yes ☒ No If yes,

Location of seep: Outflow pipe Is the seep? ☒ clear ☐ turbid ☐ N/A

Estimated flow: None Is there sediment? ☐ Yes ☒ No

Estimate seepage rate by measuring the time it takes to fill a known volume container at the outlet pipe.

Overall condition: Good – outflow pipe has no active flow

Actions needed: Monitor and maintain – mountain beaver burrows were filled as observed.

Open Channel Spillway

Spillway entrance and overflow section, or weir overflow structure

Look at channel base, side slopes; concrete floor, sidewalls; weir boards. Check all that apply

☐ debris	☐ deterioration	☐ riprap layer in poor condition
☒ vegetation	☐ settlement	☐ weir boards in poor condition
☐ slides	☐ cavitation	☐ other debris barrier in poor condition
☐ other obstructions	☐ erosion in earth or grass-lined channel	
☐ movement	☐	
☐ cracks		

Overall condition: Good -

Actions needed: Monitor and maintain – Beaver dam located in outflow channel, notching (by permit) occurs as needed, usually during spring and winter when lake water levels are elevated from rainfall. Lily pads and watershield growth observed this year.

Gates and gate controls Check all that apply: (leave blank if not applicable)

☐ operable and working	☐ deterioration	☐ other damage
☐ corrosion	☐ vandalism	☐ annual maintenance has been done

Overall condition: Unknown- Gate not operated, risk of inability to close slidegate is too high to perform attempt of operation.

Actions needed: Replace outflow system in future. Scope of project is defined, vendor identified, written project scope in hand. FEMA high hazard Dam grant pre-application submitted in 2022.

Outlet channel Check: channel base, side slopes; concrete floor, sidewalls. Check all that apply:

- ☒ debris
- ☒ vegetation
- ☐ slides
- ☐ other obstructions
- ☐ concrete in poor condition
- ☐ movement
- ☐ cracks
- ☐ deterioration
- ☐ settlement
- ☐ cavitation
- ☐ erosion in earth or grass-lined channel
- ☐ gabions in poor condition
- ☐ riprap layer in poor condition
- ☐ seepage from under-drains or along concrete exterior

Overall condition: Good – a few short logs along shoreline, water lily pads and watershield growth in collecting pool and along canal, a few standing trunks of dead alders in south end of canal/collecting pool being monitored.

Actions needed: Monitor and maintain - budget for log securing or removal efforts as needed.

Open Channel Spillway or Weir Drop Structure Cont.

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: Good – some grass growth along edges of outflow pool, no obstruction caused

Actions needed: Monitor and maintain – trim vegetation

Internal seepage/drainage controls (leave blank if not applicable)

Piezometers:

Able to locate? ☐ Yes ☒ No Readings: _____

In secure location? ☐ Yes ☐ No Condition of casing: _____

Overall condition: None installed

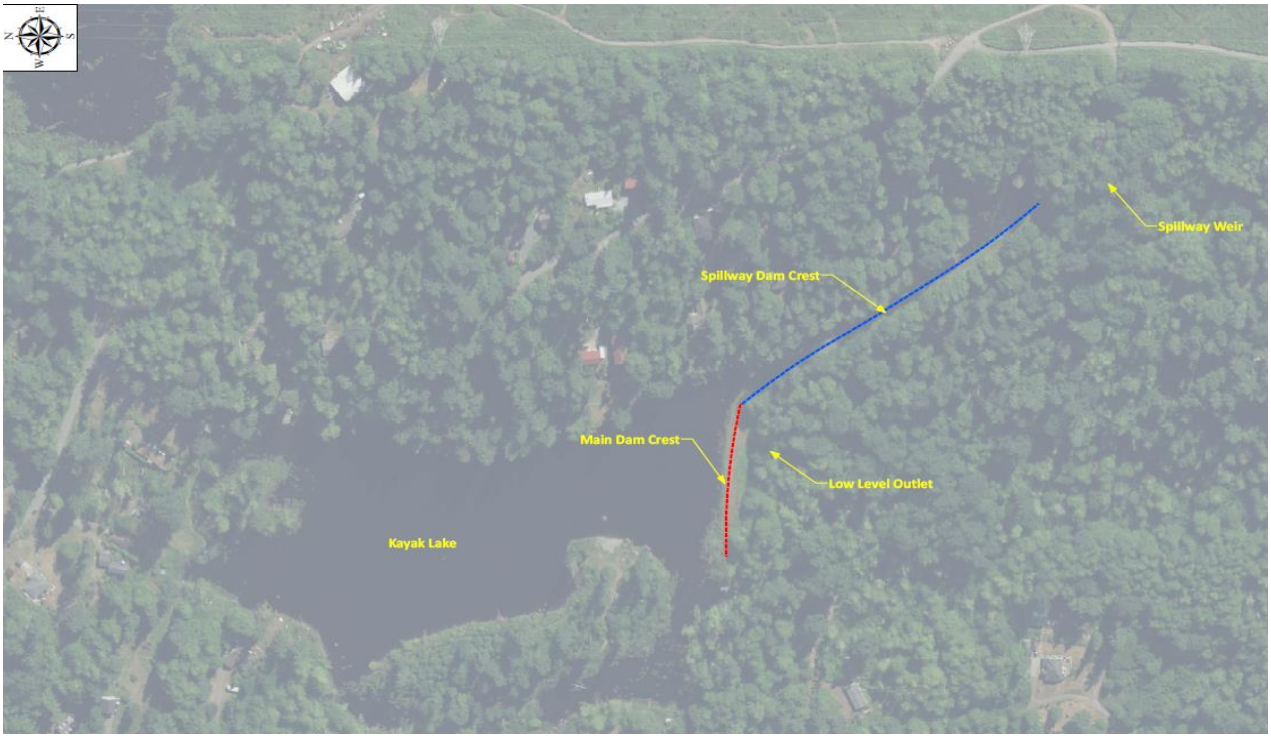
Actions needed: Installation planned in future with seismic evaluation- FEMA Grant pre-app submitted in 2022.

Emergency Action Plan (EAP) and Operation and Maintenance (O&M) Manual

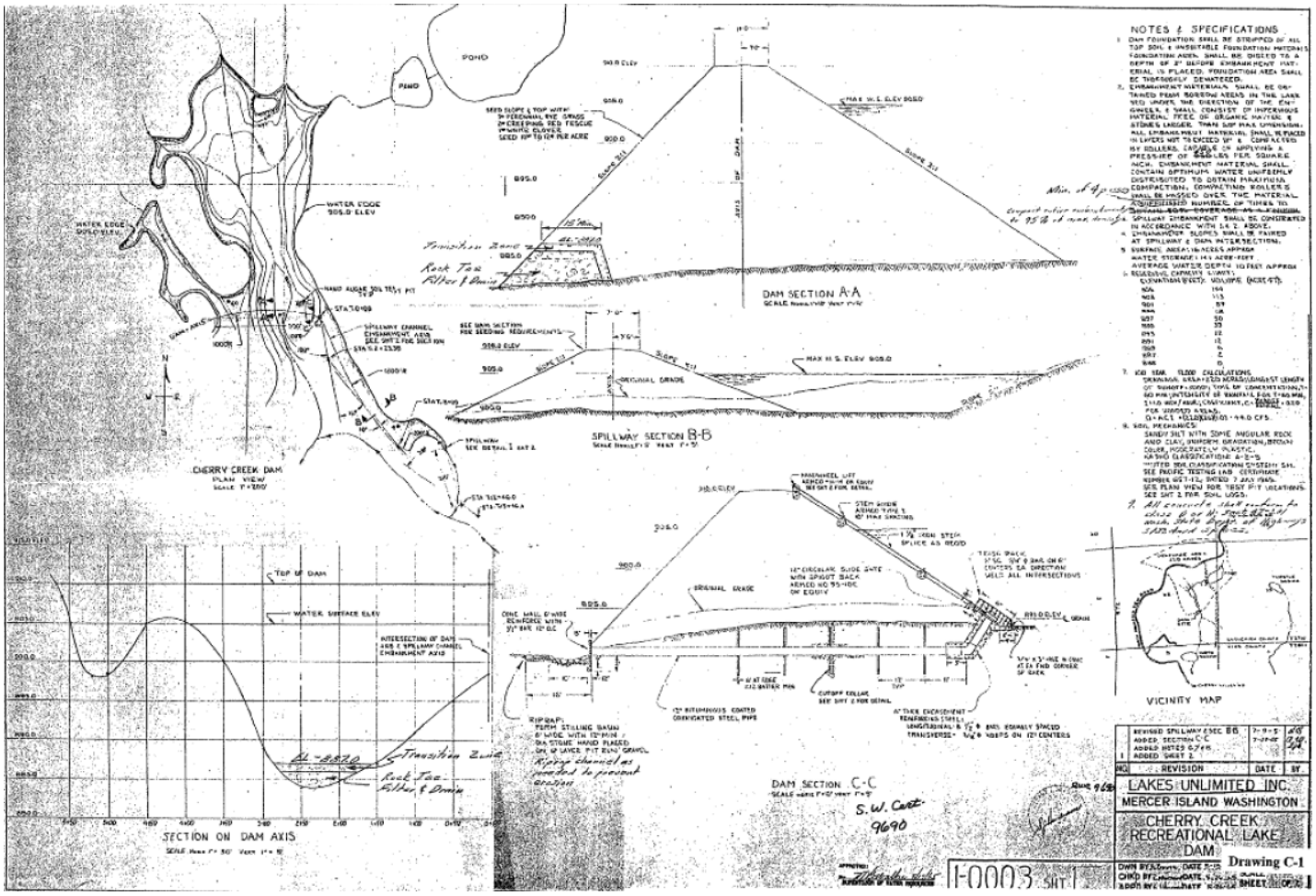
Date of EAP or last update on file with Ecology? Date: Draft prepared 9/2022

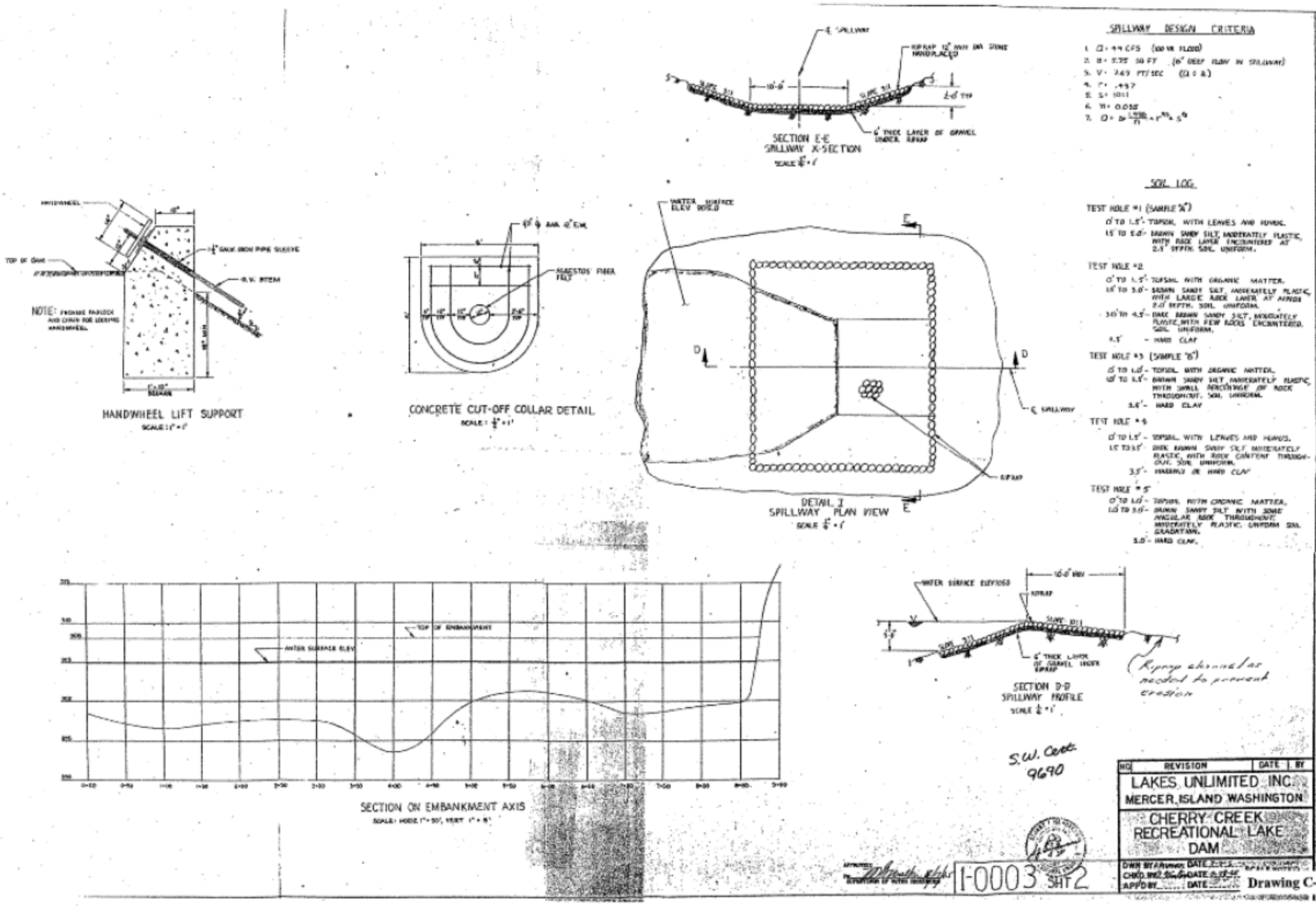
Date of O&M Manual or last update on file with Ecology? Date: Final submitted 10/2022

Drawing showing locations of hydraulic elements



Plan View of Dam




SECTION E-E
SPILLWAY X-SECTION
SPILLWAY DESIGN CRITERIA
TEST HOLE #1
0' TO 1.5' - TOPSOIL, WITH LEAVES AND HUMUS.
TEST HOLE #2
0' TO 1.5' - TOPSOIL WITH ORGANIC MATTER.
4.5' - HARD CLAY
TEST HOLE #3
3.5' - HARD CLAY
TEST HOLE #4
0' TO 1.5' - TOPSOIL WITH LEAVES AND HUMUS.
TEST HOLE #5
0' TO 1.0' - TOPSOIL WITH ORGANIC MATTER.
5.0' - HARD CLAY.
HANDWHEEL LIFT SUPPORT
CONCRETE CUT-OFF COLLAR DETAIL
DETAIL I
SPILLWAY PLAN VIEW
SECTION D-D
SPILLWAY PROFILE
Riprap channel as needed to prevent erosion
SECTION ON EMBANKMENT AXIS
S.W. Cert. 9690
REVISION
LAKES UNLIMITED INC.
MERCER ISLAND WASHINGTON
CHERRY CREEK RECREATIONAL LAKE DAM
1-0003 SHT 2
Drawing C-2

Photographs

(Insert photographs)

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 damsafety@ECY.WA.GOV 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