

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources
Nashville Environmental Field Office
711 R.S. Gass Blvd.
Nashville, TN 37216

July 8, 2022

Mr. Tim Stewart, Assistant Director Facilities & Land Management Tennessee State Parks 312 Rosa L. Parks Avenue, 2nd Floor Nashville, TN 37243

RE: Acorn Lk, <u>Creech Hollow Lk</u> and Woodhaven Lk Dams, Dickson County I. D. Nos. 22 – 7002, 22 – 7011 and 22 - 7004

Dear Mr. Stewart:

On June 28, 2022, personnel of this Division conducted Safety Inspections on the above referenced dams. Based on these inspections, the dams appear to comply with the Safe Dams Act, TCA 69-11-101 et seq., and therefore merit Certificates of Approval and Safety for operation. Enclosed are inspection reports, which outline the observed conditions at the dams.

During the inspections, certain minor conditions listed below and in the inspection reports were observed. These conditions need to be corrected or monitored to insure they do not develop into a serious threat to the safety of the dams.

- 1. The Woodhaven Lake Dam Piezometer readings must be taken twice a year and keep a log of the monitoring data at the State Park Office for review.
- 2. The Department recommends that the routine maintenance program be continued on each of the dams.

Please contact me at (615) 306-0825 if there are any questions. Thank you for your cooperation with the Division of Water Resources Safe Dams Program.

Sincerely,

Ernest Ekwugha

Environmental Protection Specialist

Enclosures/

cc: Pat Wright, Park Manager - Montgomery Bell State Park

Tim Jennette - Nashville Field Office



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION Division Of Water Resources

Nashville Environmental Field Office 711 R. S. Gass Blvd. Nashville, TN 37216

INSPECTION REPORT DAM AND APPURTENANT WORKS

| Name of Structure Creech Hollow Lake Dam I.D. 22- | 7011 |
|---|------|
| Owner Tennessee Dept. of Environment and Conservation Dickson | on |
| H.P.C. 1 Weather Sunny, 80 Date June 28, 2022 | 2 |
| Last In spection Date June 21, 2021 Lake Level 1' > Normal Poo | 1 |
| Emergency Spillway Capacity: Required 1/2 PMP* Existing 1/2 PMP | |
| Persons Present at Inspection | |
| Patrick Summerall - Maintenance Supervisor, Montgomery Bell State Park | |
| *Required capacity based on November 1, 1991, memo, available in Safe Da | |
| file. | |
| Any structural modifications, problem areas, or additional information should be sketched. If additional sheets are needed for further sketche or notes, these should also be noted and made a part of this report. | S |
| 1. UPSTREAM (LAKESIDE) SLOPE OF DAM | |
| A. Vegetative Cover Grass and weeds. | |
| | |
| | |
| Trees Yes No X | |
| Brush and/or Briers X | |
| Needs Mowing X | |

| Erosion | There was no e | rosion noted. | • | | |
|------------|-------------------|---------------|----------|-----------|---------|
| 1 | | | | | |
| Slope Prot | tection Ripra | ap at normal | pool el | Levation. | |
| | | | | | |
| Completely | y rip-rapped? | | Yes — | _ | No X |
| Areas need | ding additional : | riprap Nor | ne. | | |
| Slumps, Sl | lides, Cracks | None. | | | |
| | | | | | 11 |
| Sketch of | location attache | ed? | | Yes | No X |
| Animal Bur | crows None. | | | | |
| Drift and | Debris None. | | | | |
| Blocking t | crash rack or ris | ser inlet? | | Yes | No X |
| Remarks | | | in sat: | isfactory | conditi |
| | | | | | |

| A. | Vegetative Cover Grass. | | |
|------|--|---------------|---------|
| | | | |
| | Trees | Yes | No X |
| | Brush and/or briers | | X |
| | Needs mowing | | X |
| | Ruts from vehicle or foot traffic | · | X |
| В- | Erosion None. | | |
| | | | |
| | | | |
| С. | Slumps, Slides, Cracks None noted. | | |
| | | | |
| | Sketch of location attached? | Yes | No X |
| D (• | Remarks The crest of dam appeared in s | atisfactory (| |
| | | | |
| | | | |
| DOWN | STREAM SLOPE OF DAM | | |
| DOWN | STREAM SLOPE OF DAM Vegetative Cover Grass. | | |
| | | | |
| | | | |
| Α. | | Yes | No X |
| Α. | Vegetative Cover Grass. | Yes | No X X |

Needs reseeding

Χ

| | None noted. | | |
|----------------------|---|----------------|--------|
| <u> </u> | | | |
| - | | | |
| Seepage | There was no seepage noted alon | g toe. The lef | t side |
| the outl | et pipe appeared wet. The natu | ral spring has | s been |
| ditched | to flow into the original creek | | |
| Left Abı | ntment (Looking Downstream) | Yes | |
| Right Ab | outment (Looking Downstream) | | |
| Toe of I | Dam | | |
| Sketch o | of location attached | | |
| Soil par in the s | ticles or discolored water seepage | - | |
| ESTIMATE | D VOLUME OF SEEPAGE | Zero | |
| | all I Grande None noted | | |
| Slumps, | Slides, Cracks None noted. | | |
| | of location attached? | Yes | |
| Sketch o | | Yes | |
| Sketch o | of location attached? Burrows None noted. | Yes N/X | |
| Sketch of Animal E | of location attached? | Yes N/ | _ |
| Sketch of Animal E | of location attached? Burrows None noted. oming from hole? | Yes N/X X | _ |

| 4. | Ph | INCIP | AL SPILLWAY |
|----|------------------|--------|--|
| | A. | In | let |
| | | 1 | Type (concrete, metal, etc.) Concrete riser - typical |
| | | • | NRCS design. |
| | | 2. | Shape Rectangular. |
| | | | |
| | | 3. | Condition Satisfactory. |
| | | | |
| F | В | Out | Let |
| | | 1. | Type (concrete, metal, etc.) 30" Reinforced concrete pipe. |
| | | | |
| | | 2. | Shape Circular. |
| | | | |
| | | 3. | Condition Satisfactory. |
| | | | - |
| | | | |
| | | | Is stilling basin rip-rapped? Yes No X |
| С. | • | Remar | ks The principal spillway appeared in satisfactory |
| | | cond | ition. |
| | | | |
| | 84 | | |
| EM | 1ERG | ENCY | SPILLWAY |
| Α. | - | Гуре | (rock, earthen, etc.) 100' wide earthen channel at right |
| | | | of the dam. |
| В. | - | Condit | tion Satisfactory. |
| | | | |
| | 2 5 - | | |
| | _ | | |

5.

| | Inlet blocked by debris? | Yes | No X |
|------|--|------------|---------------|
| | Trees or brush growing in channel? | | X |
| С. | Remarks The emergency spillway channel app | peared in | satisfactor |
| | condition. | | |
| DRAI | WDOWN FACILITIES Slide gate at base of ri | ser. | |
| When | n is last known time operated? 2014. | | |
| Valv | ved on upstream or downstream side? Upst | ream. | |
| Rema | arks N/A. The dam was built before the Sa | afe Dams A | ct. |
| | | | |
| | NSTREAM HAZARD POTENTIAL 1 - (High). | | |
| Is a | change in hazard classification needed? | Yes | No X |
| If Y | Yes, explain why | | |
| | A | | |
| | | | |
| | | | |
| DO E | PLANS AND SPECIFICATIONS EXIST? | Yes X | No |
| | PLANS AND SPECIFICATIONS EXIST? So, where? Safe Dams file. | | No — |
| If s | | | No No X |
| If s | so, where? Safe Dams file. | <u>X</u> | No |

| VI | ndition. |
|--------|--|
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| _ | |
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| | |
| | |
| | |
| REC | COMMENDATIONS |
| 1 | Monitor all vot enote on the days to |
| | Monitor all wet spots on the downstream slope regularly for an |
| C | hanges. |
| 2. | Continue the routine maintenance program on the dam. |
| | program on the dam. |
| | |
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| | |
| | ECTOR'S SIGNATURE Ext & July 8, 2023 |

Ernest Ekwugha

DATE

INSPECTION REPORT SUMMARY

| DAM NAME _ | Creech | Hollow | Lake | Dam | I.D. | NUMBER | 22 - 7011 |
|------------|--------|--------|------|------|------|--------|-----------|
| INSPECTION | DATE | June | 28, | 2022 | ε | | |

The checklist below is marked to indicate the conclusions in the report.

GENERAL CONDITIONS

| | Satisfactory | Marginal | Deficient |
|---------------------------------------|--------------|----------|-----------|
| UPSTREAM SLOPE | | | |
| Vegetative Cover | X | | |
| Mowed Adequately | X | | |
| Erosion | X | | |
| Slope Protection | X | | |
| Slumps, Slides, Burrows | X | | |
| CREST OF DAM | | | |
| Vegetative Cover | X | | |
| Mowed Adequately | X | | |
| Erosion | X | | |
| Ruts, Cracks, Holes | X | | |
| DOWNSTREAM SLOPE | | | |
| Vegetative Cover | X | | |
| Mowed Adequately | X | | |
| Irosion | X | | |
| Seepage | X | | |
| Slumps, Slides, Burrows, Holes | X | | |
| PILLWAYS AND DRAWDOWN FACILITIES | | | |
| Spillway Capacity | X | | |
| rincipal Spillway Condition | X | | |
| mergency Spillway Condition | X | | |
| Prawdown Operable -0846(Rev. 1-92) | X | | RDA 278 |



Project №ame: CREECH HOLLOW LK DAM; I. D. #22-7011; DICKSON COUNTY

Inspector: Ernest Ekwugha Inspection Date: JUNE 28, 2022



Project Name: CREECH HOLLOW LK DAM; I. D. #22-7011; DICKSON COUNTY Inspector: Ernest Ekwugha Inspection Date: JUNE 28, 2022



