

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION Division of Water Resources-Safe Dams Program Jackson Environmental Field Office 1625 Hollywood Drive Jackson Tennessee 38305-4316 PHONE 731-512-1300 STATEWIDE 1-888-891-8332 FAX 731-661-6283

June 2, 2022

Mrs. Natalie Porter, Chairman Carroll County Watershed Authority P.O. Box 668 Huntingdon, TN 38344

RE: Safety Inspection Reedy Creek Dam I.D. # 09-7032 Carroll County

Dear Mrs. Porter:

On May 17, 2022, a Safety Inspection was conducted by personnel of this Division on the above referenced dam. Enclosed is an inspection report, which outlines the observed conditions at this dam.

Based on the inspection, the dam appears to comply with the Safe Dams Act TCA 69-11-101 et. seq., and therefore merits a Certificate of Approval and Safety for Operation.

During the inspection, certain conditions listed below were observed. These conditions must be corrected or monitored to insure they do not develop into a serious threat to the safety of the dam.

Spray/control the vegetation in all rip rapped areas so that the rip rap remains free of any vegetation.

Continue to improve the grass cover on the downstream slope to help with the erosion issues on the slope.

Fill the hole observed ~90' north of the concrete chute about a third of the way up the downstream slope with soil.

Continue to operate the drawdown valve annually.

Mrs. Natalie Porter June 2, 2022 Page 2

If you have not already done so, please sign the application sent to you earlier and return it along with the inspection fee of \$500.00.

If there are any questions or comments, please contact me at (731) 487-0470 or Will Little at (731) 202-6948. Your cooperation with the Safe Dams Program is appreciated.

Sincerely,

Steel Mille

Stephen Miller Safe Dams Program Division of Water Resources <u>Stephen.M.Miller@tn.gov</u>



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Jackson Environmental Field Office 1625 Hollywood Drive Jackson, Tn. 38305-4316 Phone (731) 512-1300 Fax (731) 661-6283

## INSPECTION REPORT DAM AND APPURTENANT WORKS

| Name of  | Structur | e: Ree  | edy Cree | k Dam   |      |        |       |       |        | I.D.           | : 09-  | 7032 |
|----------|----------|---------|----------|---------|------|--------|-------|-------|--------|----------------|--------|------|
| Owner:   | Carroll  | County  | Watersh  | ed Auth | nori | ty     |       |       | County | <b>/:</b> _ Ca | arroll | L    |
| H.P.C.:  | 1        | Weathe  | r:       | Clear,  | 70°s | 5      | ]     | Date: | May    | 17 <b>,</b> 2  | 2022   |      |
| Last Ins | spection | Date:   | May 13,  | 2021    |      | Lake L | evel: | 4′-   | -5′ >  | NPL            |        |      |
| Emergenc | y Spillw | ay Capa | acity: R | equired | 1: _ | PMP    |       | E     | Existi | lng:           | PMP    |      |
| Persons  | Present  | at Ins  | pection: | Steph   | nen  | Miller | & Wi  | ll Li | ttle   | - TN           | Safe   | Dams |
| Program; | Johen B  | Bowling | - JEFO   | DWR     |      |        |       |       |        |                |        |      |

Any structural modifications, problem areas, or additional information should be sketched. If additional sheets are needed for further sketches or notes, these should also be noted and made a part of this report.

## 1. UPSTREAM (LAKESIDE) SLOPE OF DAM

A. Vegetative Cover

Grass and weeds. Small trees/bushes are scattered in the rip rap.

|                       |           | Yes | No |
|-----------------------|-----------|-----|----|
| Trees                 |           |     | Х  |
| Brush and/or Briars   | (Rip rap) | X   |    |
| Needs Clearing/Mowing | (Rip rap) | X   |    |
|                       |           |     |    |

B. Erosion

No active erosion.

### C. Slope Protection

Rip rap

|  | Vec                     | N -            |
|--|-------------------------|----------------|
|  | Yes                     | No             |
| Completely Rip-rapped?   | Χ                       |                |
| Areas needing additional riprap?   |                         | X              |
| mps, Slides, Cracks<br>one observed  |                         |                |
|  | Yes                     | No             |
| Sketch of location attached?   |                         | X              |
| imal Burrows   |                         |                |
| Ione observed  | e rip rap.              |                |
| None observed<br><b>Fift and Debris</b><br>Some scattered drift in and along the   |                         | No             |
| None observed  | Yes                     | <b>No</b><br>Х |
| None observed  | Yes<br>?                | X              |
| ift and Debris   | Yes                     |                |
| ift and Debris<br>Some scattered drift in and along the<br>Blocking trash rack or riser inlet<br>marks<br>Spray/remove any vegetation in the riposis so that the rip rap remains free                                | Yes<br>?<br>.p rap on a | X<br>a routine |
| None observed<br>Fift and Debris<br>Some scattered drift in and along the<br>Blocking trash rack or riser inlet<br>marks   | Yes<br>?<br>.p rap on a | X              |
| <pre>None observed  rift and Debris Some scattered drift in and along the Blocking trash rack or riser inlet marks Spray/remove any vegetation in the ri basis so that the rip rap remains free T (TOP OF DAM)</pre> | Yes ?                   | X              |

| Trees                               |  |
|-------------------------------------|--|
| Brush and/or Briers X               |  |
| Needs Mowing X                      |  |
| Ruts from vehicle or foot traffic X |  |

2.

No active erosion observed.

## C. Slumps, Slides, Cracks

None observed

|                              | Yes | No |
|------------------------------|-----|----|
| Sketch of location attached? |     | Х  |

### D. Remarks

Continue your routine maintenance program.

## 3. DOWNSTREAM SLOPE OF DAM

## A. Vegetative Cover

Grass and weeds. Vegetation is present in the rip rapped areas.

|                       |           | Yes | No |
|-----------------------|-----------|-----|----|
| Trees                 |           |     | Х  |
| Brush and/or Briars   | (Rip rap) | X   |    |
| Needs mowing/clearing | (Rip rap) | X   |    |
| Needs reseeding       |           |     | X  |
|                       |           |     |    |

## B. Erosion

A few small bare areas are present about 20% up the slope on the north side. These areas do not appear to have gotten worse since the last inspection but should be repaired/stabilized.

## C. Seepage

None observed on the slope or toe. Left toe drain had a drip. Right toe drain had a drip.

|  | Yes          | No              |
|--|--------------|-----------------|
| Left Abutment (Looking Downstream                      | )            | Х               |
| Right Abutment (Looking Downstrea                      | m)           | X               |
| Toe of Dam   |              | X               |
| Sketch of location attached                            |              | X               |
| Soil particles or discolored wate<br>in the seepage    | r            | X               |
| ESTIMATED VOLUME OF SEEPAGE Note                       | d above.     |                 |
|  | Yes          | No              |
| Sketch of location attached?                           |              | X               |
| Animal Burrows<br>A small hole is present ~90' north   | of the concr | ete chute about |
| a third of the way up the slope.                       |              |                 |
|  |              |                 |
|  | Yes          | No              |
| Water coming from hole?                                | Yes          | No<br>X         |
| Water coming from hole?<br>Running water sounds heard? | Yes          |                 |

F. Remarks

Spray/remove the vegetation in the rip rapped areas. Fill the hole noted above with soil. Improving the vegetation on the slope would help reduce any erosion.

## 4. PRINCIPAL SPILLWAY

## A. Inlet

1. Type (concrete, metal, etc.)
Concrete riser with numerous inlets and controls.

## 2. Shape

## 3. Condition

| Ok |  |  |
|----|--|--|
|    |  |  |

## B. Outlet

| 6' X 6' concrete box culvert into | o a con | crete | box | impact | basi |
|-----------------------------------|---------|-------|-----|--------|------|
|                                   |         |       |     |        |      |
|                                   |         |       |     |        |      |
| Shape                             |         |       |     |        |      |
| -                                 |         |       |     |        |      |
|                                   |         |       |     |        |      |
|                                   |         |       |     |        |      |
| Condition                         |         |       |     |        |      |
| 0k.                               |         |       |     |        |      |
|                                   |         |       |     |        |      |
|                                   |         |       |     |        |      |
|                                   |         |       |     |        |      |
|                                   | Ye      | 2     |     | No     |      |
|                                   | 16.     | 5     |     | NO     |      |
| Is stilling basin rip-rapped?     | Χ       |       | _   |        |      |
| Remarks                           |         |       |     |        |      |
| Continue your routine maintenance | e progr | am.   |     |        |      |
|                                   | 1 - 9-  | -     |     |        |      |
|                                   |         |       |     |        |      |

## 5. EN

| A. | Тур | pe (ro | ock, ear | then,  | etc.):   |         |     |      |
|----|-----|--------|----------|--------|----------|---------|-----|------|
| E  | 501 | wide   | concret  | e chut | e channe | el over | the | dam. |

## B. Condition:

Ok.\_\_\_\_\_

|  | Yes          | No |
|--|--------------|----|
| Inlet blocked by debris?                                 |              | Х  |
| Trees or brush growing in channel?                       |              | Х  |
| C. Remarks<br>Spray/control the vegetation in all rip ra | anned areas  |    |
|  | apped dieds. |    |
| DRAWDOWN FACILITIES<br>3 - 48" slide gates on riser.     |              |    |
| When is last known time operated?                        |              |    |
| Summer 2021  |              |    |
| Remarks<br>Continue to operate the drawdown valve and    | nually.      |    |
| DOWNSTREAM HAZARD POTENTIAL: <u>1 - High</u>             |              |    |
|  | Yes          | No |
| Is a change in hazard classification neede               | d?           | Х  |
| If Yes, explain why:                                     |              |    |
|  |              |    |
| DO PLANS AND SPECIFICATIONS EXIST?                       | Yes          | No |
|  | Х            |    |
| If so, where? DWR  |              |    |
| TT SO, WHELE: DWK  |              |    |

9. DO PIEZOMETERS EXIST?

If so, how many are present?

Remarks \_\_\_\_\_

No

Х

Yes

10. GENERAL COMMENTS:

This structure appears to be in acceptable condition at the present time.

### 11. RECOMMENDATIONS:

Spray/control the vegetation in all rip rapped areas so that the rip rap remains free of any vegetation.

Continue to improve the grass cover on the downstream slope to help with the erosion issues on the slope.

Fill the hole observed ~90' north of the concrete chute about a third of the way up the downstream slope with soil.

Continue to operate the drawdown valve annually.

Stede Mille

INSPECTOR'S SIGNATURE

Stephen Miller

### INSPECTION REPORT SUMMARY

DAM NAME Reedy Creek Dam I.D. NUMBER 09-7032

INSPECTION DATE May 17, 2022

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

## GENERAL CONDITIONS

|                                   | Satisfactory | Marginal  | Deficient                             |
|-----------------------------------|--------------|-----------|---------------------------------------|
| UPSTREAM SLOPE                    |              | <b></b> 1 | · · · · · · · · · · · · · · · · · · · |
| 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            |           |                                       |
| Erosion                           | X            |           |                                       |
| Seepage                           | X            |           |                                       |
| Slumps, Slides, Burrows, Holes    | X            |           |                                       |
| SPILLWAYS AND DRAWDOWN FACILITIES |              |           | <b></b>                               |
| Spillway Capacity                 | X            |           |                                       |
| Principal Spillway Condition      | X            |           |                                       |
| Emergency Spillway Condition      | X            |           |                                       |
| Drawdown Operable                 | X            |           |                                       |

# Site Location: **Client or Facility Name:** Project No.: 09-7032 Reedy Creek Dam Carroll Co. Photo No. Date 5/17/2022 1 Description North side of upstream slope. Scattered trees/bushes in rip rap. 7, 2022 at 9:4 6

# Site Location: **Client or Facility Name:** Project No.: Reedy Creek Dam Carroll Co. 09-7032 Photo No. Date 5/17/2022 2 Description Photo of north end of dam taken from near the right abutment. Trees/bushes in rip rap.

# Site Location: **Client or Facility Name:** Project No.: Reedy Creek Dam Carroll Co. 09-7032 Date Photo No. 3 5/17/2022 Description South end of upstream slope. Scattered trees/bushes in rip rap. 2022 at 11:1 ∕lav

| Client or Facility Name:   |                 | Site Location:   | Project No.: |                  |
|--|-----------------|------------------|--------------|------------------|
| Reedy Creek Dam  |                 | Carroll Co.      | 09-7032      |                  |
| Photo No.  | Date            | 1.10             |              |                  |
| 4  | 5/17/2022       | <b>Explanate</b> |              |                  |
| Description<br>North side of d<br>downstream slo<br>bare area is now<br>vegetated. | ope. Past noted |                  |              | 2 at 10:31:05 AM |

# Site Location: **Client or Facility Name:** Project No.: 09-7032 Reedy Creek Dam Carroll Co. Date Photo No. 5 5/17/2022 Description North side on downstream slope. Bare area with minor erosion. at

| Client or Facility Name:   |                                    | Site Location: | Project No.: |                  |
|--|------------------------------------|----------------|--------------|------------------|
| Reedy Creek Dam  |                                    | Carroll Co.    | 09-7032      |                  |
| Photo No.  | Date                               |                |              |                  |
| 6  | 5/17/2022                          |                |              |                  |
| Description<br>The stick is man<br>hole ~90' north<br>chute about a th<br>up the downstr | of the concrete<br>nird of the way |                |              | 2 at 10:46:49 AM |

| Clie  | ent or Facility Nar | ne: | Site Location: | Project No.:     |
|---|---------------------|-----|----------------|------------------|
| Reedy Creek Dam                                 |                     |     | Carroll Co.    | 09-7032          |
| Photo No.                                       | Date                |     |                |                  |
| 7   | 5/17/2022           |     |                |                  |
| Description<br>Downstream si<br>concrete chute. | lope north of the   |     |                | 22 at 9:53:48 AM |

| Clie   | nt or Facility Nan                  |             | Site Location: | Project No.: |
|--|-------------------------------------|-------------|----------------|--------------|
| Reedy Creek Dam  |                                     | Carroll Co. | 09-7032        |              |
|  |                                     |             |                |              |
| Photo No.  | Date                                |             |                |              |
| 8  | 5/17/2022                           |             |                |              |
| Description<br>Photo of rip rap<br>chute. Trees/bu<br>rip rap. | o along concrete<br>shes present in |             |                |              |

| Client or Facility Name: |  | Site Location: | Project No.: |                   |
|--------------------------|--|----------------|--------------|-------------------|
| Reedy Creek Dam          |  | Carroll Co.    | 09-7032      |                   |
|                          |  | e:             |              |                   |
|                          |  |                | May 17, 202  | 22 at 10:54:13 AM |

| Photographic Log                       |            |                |                   |                  |  |
|--|------------|----------------|-------------------|------------------|--|
| Client or Facility Name:               |            | Site Location: | Project No.:      |                  |  |
| Reedy Creek Dam                        |            | Carroll Co.    | 09-7032           |                  |  |
| Photo No.                              | Date       | 1 1 1 1 1 ·    | 143 A . A . State |                  |  |
| 10                                     | 5/17/2022  | A The state    |                   |                  |  |
| <b>Description</b><br>Principal spillv | vay outlet |                |                   | 2 et 10:52.25 AM |  |