LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Office of Engineering
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-379-3000 | fx: 225-379-3002

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

January 24, 2022

Joe Beale
P.O. Box 220
BUSH, LA 70431

Re: Egret Pond Dam
Dam Inspection Report
NID ID No.: LA00399
St. Tammany Parish

Dear Mr. Beale,

The Dam Safety Program of the Public Works and Water Resources Section of the Louisiana Department of Transportation and Development (LA DOTD) is responsible for regulating the Louisiana Dam Safety Program (R.S. 38:21-28). As part of the ongoing implementation of the program, LA DOTD has obtained the services of ECM Consultants, Inc. to conduct safety inspections of dams falling within the state regulatory jurisdiction. The inspections are performed in order to minimize potential hazards to downstream life and property in the event of a dam failure.

An inspection of the **Egret Pond dam was performed on 12/15/2021. Please see enclosed Inspection Report for deficiencies.** Also included are reference materials relevant to the inspection results and general educational materials as well as a Dam Inspection Performance survey. If you have any questions regarding inspection of dams or enclosed report, please contact me by email at timothy.harper@la.gov, or by phone at (225) 379-3012. You may also contact the State Dam Safety Official, Mr. Bradley A. Sticker, P.E., by email at brad.sticker@la.gov, or phone at (225) 379-3006.

Sincerely,

Tim Harper, P.E.
DOTD Dam Safety Program

c: Bradley A. Sticker, P.E., State Dam Safety Official (elec w/o enclosure)
Jennifer D. Branton, P.E., District 62 (DOTD) (elec w/o enclosure)
Phillip Dibenedetto, E.I., District 62 (DOTD) (elec w/ enclosure/ftp)
Benjamin J. Dow, Inspector, ECM Consultants, Inc. (elec w/ enclosure/ftp)

LADOTD DAM INSPECTION AND EVALUATION REPORT

Inspection Date: 12/15/2021

Reviewed and Approved by:

Name (Signature): John A Rasi

Name (Typed or Printed):	John A. Rasi, P.E.
Firm Name:	ECM Consultants, Inc.
Address:	8048 One Calais Ave., Suite F
City, State, Zip Code:	Baton Rouge, LA 70809
Phone:	(225) 615-7885

John Alan Rasi
1/21/2022

Name of Dam:	Egret Pond
Downstream Hazard:	Low
NID ID #:	LA00399
Parish:	St. Tammany
DOTD District:	62
District Contact:	Jennifer Branton, P.E.

OWNER INFORMATION

Name of Owner	Whippoorwill Grove, Inc.
Person to Contact	Joe Beale, Whippoorwill Grove Inc P.O. Box 220 Bush, LA, 70431 Tel.: (504) 812-3149

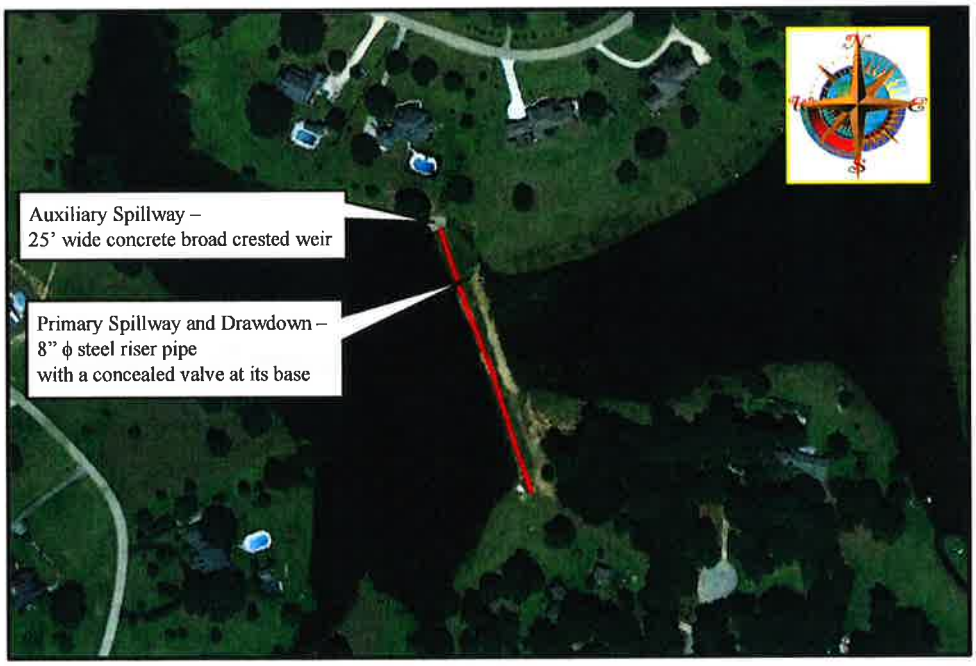
DAM INFORMATION

Location of Dam

Directions to the dam are as follows:

1. From the intersection of US Highway 190 and LA Highway 21, in Covington, proceed 11 miles northeasterly on LA 21.
2. Turn left onto Fairgrounds Boulevard and proceed 0.8 miles northwesterly.
3. Turn right onto Quail Hollow Lane and proceed 0.2 miles northerly.
4. Turn left onto the dam access road and proceed 330 feet northwesterly to the southern end of the dam.

Plan view of Egret Pond Dam (vicinity)



Plan view of Egret Pond Dam (dam site)

Description of Dam

Egret Pond Dam consists of an earthen embankment stretching 550 feet along the eastern shore of the reservoir, including the 25-foot wide auxiliary spillway. There is an 8-inch diameter steel riser pipe primary spillway with a half-pipe chute on the end. The 25-foot wide auxiliary spillway is near the northern end of the embankment.

Dam height	20.0 feet
Structural height	20.0 feet
Hydraulic height	18.0 feet
Maximum discharge	78 cubic feet/second
Maximum storage	143.0 acre-feet
Normal storage	128.7 acre-feet
Surface area	14.3 acres
Drainage area	1.5 square miles

History of Dam

The Egret Pond Dam was designed by Dave Goodyear and was constructed by Dave Goodyear in 1988. No other history of the dam was available at the time of the inspection.

INSPECTION TEAM

Name

Benjamin Dow, ECM
Kumar Ambati, ECM
Grant Berne, DOTD
Joe Beale, Whippoorwill Grove

INSPECTION RESULTS

Brief Description of Condition of Dam and Summary Items Requiring Attention

The Egret Pond Dam is in fair condition and fulfilling its intended purpose. The inspection was made on a clear and sunny day with good visibility. The following items require attention:

Crown Deficiencies:

None

Downstream Embankment Deficiencies:

None

Upstream Embankment Deficiencies:

- Minor wave induced erosion generally < 6 - 12 in. deep.

Spillway Deficiencies:

Spillway 1 (Auxiliary):

- Riprap for erosion control is missing and/or deteriorated allowing erosion to occur.

Spillway 2 (Primary):

None

Outlet Works Deficiencies:

None

Irrigation Deficiencies:

None

Instrumentation Deficiencies:

None

Corrected Items from Last Inspection:

None

Present Pool Elevation (ft.)

1 foot below concrete spillway.

Present Tailwater Elevation (ft.)

None

Operation and Maintenance Procedures

Operation and maintenance procedures are the responsibility of the owner. There were no written operation or maintenance records available during the inspection.

EARTH EMBANKMENTS

Dimensions/Shape/Describe Overall Condition

This dam consists of a 525-foot long earthen embankment that runs along the eastern shore. The crown width is 13 feet. The upstream slope descends from the crown at varying rates, and the downstream slope descends from the crown at a 4H: 1V rate.

Dam Embankment - Crown

Crown Width (Ft.):	13
Crown Length (Ft.):	525
Crown Description:	Earthen crown with grass coverage
Fence:	None
Abutment:	Both abutments appear to be in fair condition
Comments:	No additional comments

No deficiencies identified

Embankment Crown Photo 1

Embankment Crown Photo 2

Dam Embankment - Downstream Embankment

Embankment Description:	Earthen embankment with grass coverage.
Embankment Slope:	4H: 1V
Berm Description:	None
Berm Slope:	None
Toe Area:	The area at the downstream toe is Crane Lake.
Comments:	No additional comments.

No deficiencies identified

Downstream Embankment Photo 1

Downstream Embankment Photo 2

Downstream Embankment Photo 3

Downstream Embankment Photo 4

Downstream Embankment Photo 5

Downstream Embankment Photo 6

Dam Embankment - Upstream Embankment

Embankment Description: Earthen embankment with grass coverage.
Embankment Slope: Varies due to wave erosion.
Protection Type: None
Comments: The neighborhood is contemplating installing a plastic bulkhead to prevent further wave erosion.

Deficiencies (1):

Type	Description	Corrective Action
Wave Induced Erosion (Minor)	Minor wave induced erosion generally < 6 - 12 in. deep.	Backfill area to original geometry and stabilize bank to prevent further erosion. Consider armoring with riprap, soil cement or other appropriate methods. Monitor area for further deterioration.

Upstream Embankment Photo 1

Upstream Embankment Photo 2

Upstream Embankment Photo 3

Upstream Embankment Photo 4

Upstream Embankment Photo 5

Upstream Embankment Photo 6

Upstream Embankment Photo 7

Upstream Embankment Photo 8

SPILLWAY

Spillway Classification: Auxiliary
Spillway Type: Uncontrolled
Spillway Description: 25-foot wide concrete broad crested weir
Crest Description: Concrete broad crested weir
Stilling Basin: None
End Sill: None
Approach Channel: None
Discharge Channel: Rock lined swale that flows into Crane Lake.
Gates and Operations: None
Spillway Drains: None
Comments: Concrete was poured in the discharge channel downstream of the riprap; there is evidence that the discharge flows beneath the concrete in the channel, as the slab is being undermined.

Deficiencies (1):

Type	Description	Corrective Action
Riprap - Displaced/Missing/ Ineffective	Riprap for erosion control is missing and/or deteriorated allowing erosion to occur.	Replace missing riprap with appropriately sized riprap to the original design geometry.

Auxiliary Spillway Photo 1

Auxiliary Spillway Photo 2

Auxiliary Spillway Photo 3

Auxiliary Spillway Photo 4

Auxiliary Spillway Photo 5

Auxiliary Spillway Photo 6

Auxiliary Spillway Photo 7

Auxiliary Spillway Photo 8

Spillway Classification:	Primary
Spillway Type:	Uncontrolled
Spillway Description:	8-inch diameter steel riser pipe with a half-pipe discharge chute.
Crest Description:	The top of the riser pipe and the discharge chute appear satisfactory.
Stilling Basin:	None
End Sill:	None
Approach Channel:	None
Discharge Channel:	None. The pipe discharges directly into Crane Lake.
Gates and Operations:	None
Spillway Drains:	None
Comments:	A PVC sleeve was installed on the riser pipe to increase the lake elevation.

No deficiencies identified

Primary Spillway Photo 1

Primary Spillway Photo 2

Primary Spillway Photo 3

Primary Spillway Photo 4

OUTLET WORKS

Type and Description:	An 8-inch diameter steel pipe and gate valve are located at the base of the riser pipe.
Intake Structure:	The upstream end of the riser pipe was submerged.
Outlet Channel:	None, discharges directly into the downstream Crane Lake.
Gates and Related Devices:	The gate valve was buried in riprap during the inspection.
Comments:	Valve is buried, should be uncovered for use.

No deficiencies identified

Outlet Works Photo 1

Outlet Works Photo 2

IRRIGATION STRUCTURE

Type and Description:	None
Irrigation:	None
Intake Structure:	None
Outlet:	None

Channel:	None
Gates and Related Devices:	None
Comments:	None

No deficiencies identified

INSTRUMENTATION

Monumentation/Surveys:	None
Observation Wells:	None
Weirs:	None
Piezometers:	None
Staff Gage Description:	None
Staff Gage Reading (Ft.):	1 foot below concrete spillway crest
Tailwater Staff Gage Description:	None
Tailwater Staff Gage Reading (Ft.):	None
Comments:	6 inches below top of riser

No deficiencies identified

RESERVOIR

Slope
The reservoir slopes appear to be in satisfactory condition and fulfilling their intended purpose.

Bank
The reservoir banks appear to be in satisfactory condition and fulfilling their intended purpose.

Sedimentation
There were no visible areas of sedimentation occurring within the reservoir at the time of the inspection.

Reservoir Photo 1

Reservoir Photo 2