

# **STATE OF MARYLAND** DEPARTMENT OF THE ENVIRONMENT WATER AND SCIENCE ADMINISTRATION



# WATER QUALITY CERTIFICATION

## **CERTIFICATION NUMBER: 21-WQC-0326**

ISSUED TO:	Maryland Department of Natural Resources 580 Taylor Avenue Annapolis, Maryland, 21401 Attn: Claudia Donegan
EFFECTIVE DATE:	May 04, 2022
<b>PROJECT LOCATION:</b>	Jabez Branch Tributary 3

Millersville, Maryland

**DESCRIPTION OF CERTIFIED PROJECT:** To restore a tributary to Jabez Branch. This project will temporarily impact 2,468 LF (18,768 SF) of stream channel, 70,316 SF of forested nontidal wetlands, and 70,419 SF of 25-foot wetland buffer. This project is located along Jabez Run Road, approximately 0.5 miles north of the intersection with Crain Highway, Millersville, in Anne Arundel County.

# WATER QUALITY CERTIFICATION

UNDER AUTHORITY OF SECTION 401 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND ITS AMENDMENTS AND IN ACCORDANCE WITH § 9-313 THROUGH § 9-323, INCLUSIVE, OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND, THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION (DEPARTMENT) HAS DETERMINED THAT THE REGULATED ACTIVITIES DESCRIBED IN THE REQUEST FOR CERTIFICATION WILL NOT VIOLATE MARYLAND'S WATER QUALITY STANDARDS, IF CONDUCTED IN ACCORDANCE WITH THE CONDITIONS OF THIS CERTIFICATION.

This Water Quality Certification (Certification) is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments, Title 9, Subtitle 3 of the Environment Article, and Code of Maryland Regulations (COMAR) 26.08.02.10. The Maryland Department of the Environment (Department) has determined from a review of the request application file that the project activities described in the above will not violate Maryland's water quality standards, provided that the following conditions are satisfied. This Certification does not relieve any person conducting activities under this Certification (Certification Holder) from the responsibility to obtain any other approvals, licenses, or permits in accordance with federal, State, or local requirements.

The Certification Holder subject to this Certification shall comply with the following conditions:

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#### SPECIAL CONDITIONS

- 1. The Certification Holder shall submit a detailed Monitoring and Adaptive Management Plan to be approved by MDE prior to commencement of any work authorized under this Certification. The Monitoring and Adaptive Management Plan shall contain the Water Quality Performance Standards and benchmarks for which the project will be monitored and reported consistent with the requirements of the Clean Water Act.
- 2. The Certification Holder will be responsible for monitoring the project for a minimum of (10) years after completion of construction. Monitoring must be conducted a minimum of once per year during the years that monitoring reports are required. Certain sites may require more frequent monitoring (e.g., twice a year during spring and fall) and reporting during the early stages of development to quickly identify and address problems and/or concerns. The extent of monitoring may be terminated or reduced no earlier than the end of the fifth monitoring year over part or the entire site upon a determination by the U.S. Army Corps of Engineers (Corps) and MDE, that the site has achieved all performance-based milestones identified in the Monitoring and Adaptive Management Plan each monitoring year and all final performance standards for two consecutive monitoring events. Conversely, the Corps and MDE, may extend the original monitoring period upon a determination that performance standards have not been met, the site is not on track to meet them (e.g., remediation or adaptive management required), or in consideration of the amount and distribution of precipitation prior to and during the growing season compared with a "typical year". If a natural disaster occurs during the monitoring period, remediation or adaptive management may be required and the monitoring period may be extended.
- 3. The monitoring period may be extended by MDE if the monitoring indicates noncompliance with water quality standards or adaptive management measures are implemented in accordance with the approved Monitoring and Adaptive Management Plan.
- 4. The monitoring period begins the year the project's construction is completed. For each monitoring report, vegetative monitoring shall be conducted between May 1 and September 30 for forested/scrub-shrub systems and between June 15 and September 30 for emergent systems. Site visits should preferably be conducted during a period with normal precipitation and groundwater levels. Vegetation monitoring must be conducted a minimum of once per year during the years that monitoring reports are required.
- 5. Water Quality parameters of temperature, dissolved oxygen, and pH must be monitored at each established monitoring site identified as (SEVE-102, SEVE-103 & SEVE-104) the entire summer critical period of March 1 September 30th, every 15 minutes. Methods and procedures shall be identified in the Monitoring and Adaptive Management Plan.
- 6. Visual monitoring for the occurrence of iron oxidizing bacteria at each established monitoring site identified as (SEVE-102, SEVE-103 & SEVE-104) as well as at proposed location immediately downstream of the project area. The monitoring and reporting protocol will be included in the Monitoring and Adaptive Management Plan to be reviewed and approved by MDE. Monitoring results should be submitted in the annual monitoring reports and should also provide a comparison for all monitoring years assessed and any corrective measure implemented.

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- 7. The Department may extend the original monitoring period upon a determination that performance standards as determined in the Monitoring and Adaptive Management Plan have not been met, the water quality parameters are not met or are not on track to be met. If a natural disaster occurs during the monitoring period, remediation or adaptive management may be required and the monitoring period may be extended.
- 8. Monitoring Reports: Monitoring reports should be concise and effectively provide the information necessary to assess the status of the project. At a minimum, the monitoring reports must identify and evaluate changes in channel stability; structural stability and condition; in-stream habitat and water quality, and vegetation viability. Evaluate structural stability by inspecting and scoring (functioning, functioning at risk, not functioning, or failure) at each established monitoring sites identified as (SEVE-102, SEVE-103 & SEVE-104) and any monitoring sites established in addition to these. Report vegetation species richness and planted vegetation viability, evaluate stream functional quality using an assessment method such as EPAs Rapid Bioassessment Protocol (RBP) low gradient stream habitat form. Results of the stream function assessment must be shown for all monitoring years assessed at the time the report is submitted, including preconstruction in each monitoring report. The monitoring effort must include documentation of temperature, turbidity, and dissolved oxygen levels in-stream above, at, and below the project area; visual field observations; photographic documentation at monumented points; vegetation viability measurements (including confirmation of the restoration of temporary wetland impacts, the relocation on-site of permanent wetland impacts, and the creation of new wetlands); and, identify any necessary corrective measures. Additional information which demonstrates project success should be included in annual monitoring reports. Reports should provide all information necessary, including any supporting data such as plans, maps, and photographs along the entire stream restoration project area and photos of each top of riffle, to illustrate site conditions and whether the project is meeting its objectives and water quality standards.
- 9. Biological Monitoring. Biological monitoring will occur for Monitoring Years 2, 4, 6 and 8. For stream biological monitoring, events shall occur consistently within the index period as required by the MBSS; between March 1 and April 30 for benthos sampling and between June 1 and September 30 for fish sampling. The number and location of monitoring stations shall be determined, and approved by the MDE and the Corps, on a case specific basis and shall remain consistent throughout the monitoring period. Scientific Collection permits for conducting benthic and fish sampling will be coordinated with the Maryland Department of Natural Resources (DNR). All field sampling as well as laboratory sample processing shall be performed by or under supervision of a professional aquatic biologist.
  - a. Macroinvertebrate abundance will be evaluated using a modified MBSS methodology.
  - b. Macroinvertebrate Tolerance species diversity will be evaluated using a modified MBSS methodology.
  - c. Fish Presence abundance will be evaluated using a modified MBSS methodology.
  - 10. The Certification Holder shall prepare an invasive species eradication and maintenance plan to remove non-native invasive plant species within the project site if site visits

document their presence. The plan must be submitted to the MDE for approval along with the year one monitoring report.

- 11. The Certification Holder shall submit annual monitoring reports electronically to the MDE by December 31 each monitoring year, including vegetation monitoring reports. A paper copy and an electronic version must be submitted to MDE.
- 12. The continuous Water Quality monitoring data is required to be submitted monthly by the 5<sup>th</sup> of the month for the month from March 1-September 30<sup>th</sup>, in addition to a yearly summary report to be-included in the annual monitoring report.
- 13. Adaptive Management Review. The Certification Holder shall be responsible for performing approved measures through adaptive management strategies if MDE, the U.S. Army Corps of Engineers (Corps) or the Certification Holder determine the project is not meeting the performance standards as set forth in the Monitoring and Adaptive Management Plan or satisfying the water quality parameters and standards. The approved adaptive management plan will guide decisions for revising plans and implementing measures to address circumstances (foreseeable and unforeseen) that adversely affect project success. Any deviations from the approved monitoring and adaptive management plan requires approval from MDE and the Corps.
- 14. The Certification Holder must include appropriate information in the monitoring reports about performance issues and implementation of approved adaptive management measures to allow the Corps and MDE to assess how the project is progressing. The Certification Holder must notify the Corps and MDE as soon as possible if the project is not achieving its performance standards as anticipated. The Corps and MDE, in coordination with the Certification Holder and other appropriate agencies, will evaluate any deficiencies and determine if proposed measures will address those deficiencies and/or require modification of the approved plan(s).
- 15. The Certification Holder shall maintain the as-built integrity of the authorized stream restoration project to the extent practicable and shall ensure that the restoration is self-sustaining and, on a trajectory, to meet the restoration goals. The Certification Holder must notify and provide to MDE and the Corps, a detailed description and construction plans for any necessary corrective measures, including maintenance and repair, or alteration in any way, of the permitted stream restoration a minimum of fifteen (15) days prior to performance of such corrective measures for MDE and Corps review and approval.
- 16. The Certification Holder is responsible for accomplishing the corrective work if MDE and the Corps determine the project has not been satisfactorily completed as set forth in the approved site plan. If MDE or the Corps do not find the project satisfactory, the Certification Holder will be required to develop a remediation plan and an extension of monitoring time may be required to cover any necessary remedial work.
- 17. The Certification Holder shall ensure plantings have an 85% aerial coverage for five (5) consecutive years following the completion of the project. The permittee may include in

the 85% coverage any native volunteer plant species. If 85% coverage is not attained, the reasons that coverage cannot be achieved must be determined, and corrective shall be taken as appropriate, and the area replanted.

- 18. Best management practices must be employed to minimize impacts to wetlands and waterways.
- 19. Temporary disturbance to wetlands and waterways must be restored to pre-construction conditions or better. A final accounting of temporary wetland impacts/relocations and creation must be included in the year 6 monitoring report.

#### **GENERAL CONDITIONS**

- 1. The Certification Holder shall meet all water quality-related performance standards and conditions required by the Department in any state issued authorization for activities in Waters of the United States to ensure that any discharges will not result in a failure to comply with water quality standards in COMAR 26.08.02 or other water quality requirements of state law or regulation.
- 2. Structures and activities may not interfere with movement of aquatic life, fish, and other wildlife nor cause their entanglement.
- 3. When operating an intake structure, the Certification Holder shall use a screen having a nominal mesh size of 1 mm and an intake velocity not to exceed 0.5 ft/sec. during the Time of Year Restriction specified in the applicable Department authorization.
- 4. Non-native species may not be introduced with adverse effects on the aquatic ecosystem.
- 5. The proposed project shall be constructed in accordance with the approved final plan by the Department, or, if Department approval is not required, the plan approved by the Corps; and its approved revisions.
- 6. Activities which result in an earth disturbance subject to the requirements in Annotated Code of Maryland, Environment Article, Title 4 and COMAR 26.17.01 shall have an erosion and sediment control plan approved by the appropriate approval authority, including following the stabilization requirements set forth in COMAR 26.17.01.07 and "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control," as may be amended.
- 7. The disturbance of the bottom of the waterway and sediment transport into adjacent State waters shall be minimized.
- 8. All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into waters of this State.
- 9. The Certification Holder shall adhere to the construction time of year restrictions, unless waived or amended by the Department, as identified in a state authorization.

- 10. The Certification Holder shall obtain any and all additional authorizations or approvals, including self-certifying General Permits issued by the Department, and shall comply with all conditions of such authorizations.
- 11. This Certification does not obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
- 12. This Certification does not authorize any injury to private property, any invasion of rights, or any infringement of federal, state, or local laws or regulations.
- 13. The Certification Holder shall allow authorized representatives of the Department access to the site of authorized activities during normal business hours to conduct inspections and evaluations of the operations and records necessary to assure compliance with this Certification.
- 14. This Certification is valid for the project identified herein and the associated U.S. Army Corps of Engineers authorization until such time that it expires.

# STATEMENTS OF NECESSITY AND CITATIONS

 Statement of Necessity for Special Conditions 1, 3, 5, 6, 7 and General Conditions 1, 5, <u>10, 11</u>: The condition is necessary to ensure that water quality standards are met and designated uses are maintained.

<u>Citations</u>: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02B(1); 26.08.02.03B(1)(b); 26.08.02.03B(2)(e); COMAR 26.08.03.03-3.D; COMAR 26.17.04; COMAR 26.23; COMAR 26.23.02.06

2. <u>Statement of Necessity for Special Conditions 1-8, 11-16, & 19</u>: Activities which result or may result in a discharge to regulated waters, including replacement of wetland/water resources as an offset/mitigation may require monitoring to ensure that water quality standards are met and designated uses are maintained, and to determine if remedial measures are needed to restore compliance with water quality standards if they are not met as a result of the discharge. The condition is necessary to ensure that fill material does not increase turbidity or other parameters in violation of general and numeric water quality standards and interfere with designated uses and to ensure that offsets to regulated waters are successfully implemented. <u>Citation</u>: COMAR 26.08.02.03-3A(5); COMAR 26.08.02.01B(2); COMAR 26.08.02.02B(1); COMAR 26.08.02.03B; COMAR 26.08.02.02B(1); 26.08.02.03B(1)(b); 26.08.02.03B(2)(e); 26.08.02; 26.08.01.02A; 26.08.02.09A; 26.08.02.02B(1)(d); COMAR 26.23; 26.08.02.03-3.D; COMAR 26.08.02.03B(2)

Statement of Necessity for Special Conditions 1-4, 7, 8, & 11-16 and General Condition 13: Conditions of certification involve precise actions to comply with water quality standards. Site inspection may be necessary to ensure that limits, methods, and other requirements are met to ensure that water quality standards are met and designated uses are maintained. These conditions are necessary to ensure that the activity was conducted and project completed according to terms of the authorization/ certification, while allowing for review of in-field modifications which may have resulted in discharges to ensure that water quality standards were met. Designated uses include support of water contact recreation, protection of nontidal aquatic life, and protection of waters which have the potential for or are suitable for the growth and propagation of self-sustaining trout populations and other coldwater obligate species including, but not limited to the stoneflies tallaperla and sweltsa.

<u>Citation:</u> Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02.B(5); COMAR 26.08.03.03-3.D; COMAR 26.23.02.06; COMAR 26.23; COMAR 26.17.04

3. <u>Statement of Necessity for Special Conditions 1, 2, 3, 7, 8, 13, 14, 15, & 16:</u> Unauthorized discharges may enter regulated waters as result of activity or structural failure. A plan to address unauthorized discharges will prevent or address further violations of water quality standards and failure of water to meet designated uses, including uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance.

<u>Citation</u>: COMAR 26.08.02.02B(1)d; COMAR 26.08.02.03B(1) and B(2); 26.08.02.01B(2); 26.08.02.02B(1)

4. <u>Statement of Necessity for Special Conditions 1, 2, 4, 8, 9, 10, 11, 17, 18, & 19:</u> Nontidal wetlands, buffers, and waterways provide essential habitat, water quality, food, and movement corridors for wildlife, and support of water contact recreation, protection of nontidal aquatic life, and protection of waters which have the potential for or are suitable for the growth and propagation of self-sustaining trout populations and other coldwater obligate species including, but not limited to the stoneflies tallaperla and sweltsa. Successful establishment is necessary to prevent discharges which interfere with designated uses, including growth and propagation of coldwater fish and other aquatic life through loss of stream channel habitat and wetlands. Required establishment, re-establishment, or enhancement and loss limits will maintain the designated use. Adaptive plans allow for adjustments to ensure that habitat and the associated designated uses are maintained.

<u>Citations:</u> COMAR 26.08.02.02.B(5); COMAR 26.08.02.03B(1)- B(5); COMAR 26.08.03.03-3.D; COMAR 17.04; COMAR 26.23

5. <u>Statement of Necessity for Special Condition 10 and General Condition 4</u>: Nuisance or non-native species may spread and disrupt and dislodge native species from their habitat, leading to declines in distribution, density, growth and propagation. This may result in failure to support native species; and growth, propagation of fish, other aquatic life, and wildlife. Limitations on loss will sustain habitat for a variety of aquatic species. In addition to direct loss, turbidity created by construction or ongoing operation must be limited for support of aquatic life and to meet water quality standards. The conditions ensure that discharges will not result in failure to support designated uses including support of water contact recreation, protection of nontidal aquatic life, and propagation of self-sustaining trout populations and other coldwater obligate species including, but not limited to the stoneflies tallaperla and sweltsa.

<u>Citations</u>: COMAR 26.08; COMAR 26.08.02.02.B(5); COMAR 26.08.03.03-3.D; COMAR 26.23.02.06; COMAR 26.23; COMAR 26.17.04

6. <u>Statement of Necessity for General Conditions 2, 3</u>: Movement of aquatic life and passage of flows is essential for growth and propagation of aquatic life, fish, and other wildlife to meet these designated uses.

<u>Citation</u>: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.10E; COMAR 26.08.02.02B(1); 26.08.02.03B(1)(b); 26.08.02.03B(2)(e); COMAR 26.17.01; COMAR 26.23.02.06; COMAR 26.23; COMAR 26.17.04

7. <u>Statement of Necessity for General Condition 6, 7, 8:</u> Fill or construction material within or adjacent to regulated resources or other earth disturbance may result in discharges that result in impacts to water quality, clarity, growth and propagation of fish, other aquatic life, wildlife, potable water; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance.

<u>Citations</u>: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.10E; COMAR 26.08.02.02B(1);

26.08.02.03B(1)(b); 26.08.02.03B(2)(e); COMAR 26.17.01; COMAR 26.23.02.06; COMAR 26.23; COMAR 26.17.04

8. <u>Statement of Necessity for General Condition 8:</u> Material within or adjacent to regulated resources may result in discharges that result in impacts to water quality and designated uses.

<u>Citations:</u> Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02B(1); 26.08.02.03B(1)(b); 26.08.02.03B(2)(e); COMAR 26.23.02.06; COMAR 27.17.04; COMAR 26.23

9. <u>Statement of Necessity for General Condition 9</u>: Restrictions on instream construction are necessary to protect designated uses for propagation and growth of fish, other aquatic life, and wildlife.

<u>Citations:</u> Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.03-3.D; COMAR 26.23.02.06

10. <u>Statement of Necessity for General Condition 9</u>: The time of year restriction is necessary to maintain the designated use- support of water contact recreation, protection of nontidal aquatic life, and protection of waters which have the potential for or are suitable for the growth and propagation of self-sustaining trout populations and other coldwater obligate species including, but not limited to the stoneflies tallaperla and sweltsa.

Citations: COMAR 26.08; COMAR 26.08.02.02.B(5); COMAR 26.08.03.03-3.D

11. <u>Statement of Necessity for General Condition 12</u>: The condition is necessary to clarify the scope of this certification to ensure compliance with water quality regulations, without limiting restrictions through other requirements.

<u>Citation:</u> Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08, COMAR 26.08.02.10E; COMAR 26.23.02.06; COMAR 26.17.04; COMAR 26.23

12. <u>Statement of Necessity for General Condition 14</u>: This condition is necessary to qualify the period of applicability of the terms and conditions of this Certification to be protective of Maryland water quality standards.

<u>Citations</u>: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; 40

C.F.R. 121, 15 C.F.R. 930, Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.23.02.06; COMAR 26.23; COMAR 26.17.04

Failure to comply with these conditions may subject the Certification Holder to criminal and/or civil penalties or other enforcement action in accordance with applicable law.

**CERTIFICATION APPROVED:** 

DATE:

D'Le Cmp

May 5, 2022

D. Lee Currey Director Water and Science Administration