Initiation of the National Environmental Public Health Performance Standards in Georgia
2009 - 2013

Environmental Public Health Leadership Institute Fellow:

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EXECUTIVE SUMMARY:

Since the Reorganization Act\(^1\) of 1972, when Georgia’s Department of Public Health was changed to a division within the Department of Human Resources, Environmental Health services have slowly evaporated to become primarily enforcement in nature. Over the years, little of the strategic planning focused on the core competencies or essential services for public health. In 2009, Georgia’s Environmental Health Branch conducted an assessment of its programs and operations with the help of the Centers for Disease Control, Environmental Health Services. This assessment revealed substantial opportunities to improve Environmental Health essential services in monitoring, mobilization, and evaluation, as defined in the National Environmental Public Health Performance Standards version 2.0 (EnvPHPS)\(^2\).

This project builds on Georgia’s assessment work by attempting to determine the possible points for intervention, and presents the plan Georgia is implementing to act on these intervention points to improve the overall performance of all the Ten Essential Services of Environmental Public Health. This plan includes completing the implementation of a statewide Environmental Health Information System (EHIS), training management staff in data analysis, and establishing reporting requirements based on defining the best management practices within local operations.

Upon completion, this project should result in a marked increase of Georgia’s ability to provide essential services and perform in accordance with the EnvPHPS to better protection of the citizens and visitors to this state from environmental risk factors to their health.

INTRODUCTION/BACKGROUND:

The State of Georgia public health services are managed by the Department of Community Health (DCH), Division of Public Health (DPH). This division determines policy and supports the activities of 159 county boards of health and their employees. These employees provide direct public health services, including, but not limited to clinical, consultative, and regulatory operations. The county operations are managed by 18 district offices, each having a Medical Director. Every county has at least one assigned Environmental Health Specialist (EHS) and each district has an Environmental Health District Manager (EHDM). There are approximately 425 Environmental Health professionals working within this structure to serve more than 9.8 million citizens of Georgia\(^3\) and its visitors.

After restructuring in 1972\(^1\), DPH gradually reduced its presence in legislative and public venues due to being reduced from a department level agency with direct contact with the Governor’s office, to a division level agency without this access and accountability. Environmental Health (EH) staffing at the state office was reduced to as little as two staff members during this history, and the reporting requirements for counties and district EH operations were eventually neglected until 1994, when planning started for the 1996 Olympic Games in Atlanta. These new reports were limited to activities surrounding the Olympics. In 1998 the state EH office initiated a new monthly report requirement that only collected the counts of basic operational services provided
by the county EH staff. This coincided with one of the most positive economic periods in Georgia’s history, where statewide unemployment reached as low as 3.3\%\textsuperscript{4}.

The new reporting and positive economy supported advancing the staffing needs for local EH operations and increase funding for the state EH office to cover the increase in services related to home construction, food service, swimming pool, tourist accommodations, and other activities regulated by EH operations. However, this report did not describe the quality or effectiveness of the services provided.

To better determine the quality of work performed and assess the laws, rules, and policies of the State, Georgia contracted with Garrison Enterprises, Inc. in July, 2005 to build a web-based, statewide Environmental Health Information System (EHIS) to collect all service related records. The EHIS was introduced for use on August 15, 2008 in two health districts, initially covering 23 counties. Currently, the EHIS is used by 119 counties within 12 public health districts. July 1, 2011 is the planned completion date where data from all 159 counties will be collected within the system.

During 2009, the CDC and Georgia’s EH management conducted an assessment of all of Georgia’s EH programs and operations within the framework of the Ten Essential Services of Environmental Public Health. This assessment used the Environmental Public Health Performance Standards, version 2.0 (EnvPHPS). All EH district and state EH program managers worked with their staffs to complete the assessment survey. The intent of the assessment was to determine the strategic direction needed to improve the effectiveness and efficiency of EH in Georgia. This assessment was the first to encompass an entire state’s operations, including all levels of management and policy.

The results of the assessment revealed substantial gaps in the following Essential Environmental Public Health Services. Of a total 100 points, the lowest scores were:

\begin{itemize}
  \item \textbf{#1 Monitoring}: environmental and health status to identify and solve community environmental health problems. Overall Score: 31
  \item \textbf{#9 Evaluate the}: effectiveness, accessibility, and quality of personal and population based environmental health services. Overall Score: 21
\end{itemize}
The assessment indicated high enforcement capabilities. The limited reporting used before this assessment provided measurements of staffing and regulatory work, so the axiom stating that you get more of what you measure is supported. However, this also allowed for lost support of all other essential services. This is evidenced in the trend of staffing changes not matching the increase in regulated facilities, as fewer EHS’s are assigned less non-regulatory work.

**Figure 2: Georgia Environmental Health Staffing vs. Count of Regulated Facilities**

![Graph showing the relationship between average total EH staff in state and the count of regulated facilities from 2004 to 2010.](image)

**Problem Statement:** Georgia has a limited ability to monitor environmental health risks or evaluate the environmental health services effectiveness or quality. This is resulting in continued movement toward purely regulatory operations that can not address emerging illnesses and do not support the allocation of resources required for effectively protecting the public from environmental health risks.
**Behavior Over Time Graph:**

This graph represents the results of no change to the focus of current performance metrics. It shows the effects on Georgia’s ability to address existing and emerging health risks to its communities. The eventual result is an increase of environmental related illness. In response, communities will enact more enforcement and regulation.

With no establishment of monitoring and evaluation performance metrics, the loss of capabilities has proven to be a perpetual cycle. Evidence of this cycle is seen in how communities in Georgia increased resources for local EH work through fees assigned to the new or existing regulations, rather than supporting monitoring and evaluation efforts directly through general funding. A secondary symptom is the dependence on fee based revenue to support EH operations.

*Figure 3: Behavior Over Time*
Systems Thinking Approach: Causal Loop Diagram and Applicable Archetype

In applying the systems thinking approach to the focusing question for this project, the question distilled itself down to:

Despite all efforts, why does Georgia have such a low capability to perform monitoring and evaluation services in environmental health?

Consideration of this specific question revealed the mindset causing perpetual reactionary correlation between the demand for environmental health services and fee schedule changes. The fee increases were used to provide resources for the rise in demand for regulatory work needed to address new or increasing health risks to communities. A graphic description of the current behavior is provided in the causal loop diagram titled Fixes that Backfire (Figure 4). The mental model for this behavior fits the statement:

If the demand for work is up, then the fee for that work should cover all that is needed to accomplish the job.

For example, when Georgia counties experienced extraordinary growth and an increase in failing onsite sewage systems, the boards of health raised all current fees and added new fees to cover the increases in operational cost. This change did not include consideration of the monitoring or evaluation work needed. As such, when the county experienced dropping economic conditions, the fee income dropped substantially. This resulted in several counties reducing positions in both count, and hours of full time to part time employees.

Behavior under this mental model is evidence that monitoring and evaluation are not part of the resource allocation decision making process. The premise that all environmental health services can be funded by fee assignment based on demand for permits, inspections, and other regulatory work gives evidence that only a few of the Ten Essential Services are considered. Unfortunately, this establishes a set of conditions that reduce the capacity to perform services that are not directly requested by individuals, as in evidenced in Georgia’s performance standards appraisal (Figure 1).

Study of these conditions reveals that no performance metrics in use in Georgia are based on the EnvPHPS. All environmental health work is measured only by the number of direct services provided. This limited assessment does not support any application of the EnvPHPS. The resulting strength in enforcement is evidence of the axiom; you get more of what you measure. Following this train of thought, one solution emerged.

This project will institute a complete performance measure matrix that fully supports the EnvPHPS. This will include establishing the metrics and training all staff in their use at each operation and management level. The intent of this project is to address the reactionary system at the most effective leverage point as seen in the second causal loop diagram (Figure 5).
Figure 4: Causal Loop Diagram #1

“Fixes that Backfire”
Causal Loop Diagram and Applicable Archetype of Current Reactionary System

- Health risks to community
- Total resources available for all essential services
- Percentage of total funding by fee based revenue
- More funds needed to meet costs of all services
- Direct service requests increase with population growth, so it should cover all increasing needs
- In order to have more resources, we need more revenue from fees to afford them

- Capacity to perform Monitoring and Evaluation services
- Dependence on fee based funding
- Ratio of performance measures: Essential Services / Fee Funded Services
- Funding pressure
- Management work to ensure high performance based on measures
Figure 5: Causal Loop Diagram #2

Causal Loop Diagram Modified to Address Leverage Point

Leverage Point: Number of performance measures based on monitoring

Total funding from all sources

Dependence on fee-based funding

Funding for essential indirect services (i.e., 10 Essential Services of EH)

Direct service requests do not support all essential services

Health risks to:

Self protection capability of served populations

Ability to address known and emerging health risks

Quality and effectiveness of services

Monitoring efforts

Evaluation efforts

Community engagement

2010–2011 Fellow Project
National Environmental Public Health Leadership Institute
10 Essential Environmental Health Services:

Georgia’s work to implement the EnvPHPS is directly in line with establishing the State’s operations on track with all of the 10 Essential Services of Environmental Public Health. The EnvPHPS were established in a cooperative effort with the National Public Health Performance Standards Program at the Centers for Disease Control and Prevention to serve as a module of those standards. By increasing work in the monitoring and evaluation services, Georgia will have the evidence needed to expand its capabilities in all the other services.

Figure 6: Ten Essential Environmental Public Health Services

National Goals Supported

1. Healthy People 2010 (HP2010) objectives and the draft of the objectives for Healthy People 2020 (HP2020)
   - HP2010 8-26EH, EH HP2020–6 – Improve the utility, awareness, and use of existing information systems for environmental health. Establishing the EHIS as a statewide data collection and analysis solution fully supports expanding the use and awareness of environmental health data. Use of this system for monitoring of health risk trends and the effectiveness of operations requires a continually expanding roll of data review and use in policy and planning activities
   - EH HP2020–2 – Increase the number of Territories, Tribes, States, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to environmental hazards. Monitoring the trends of complaints, enforcement activities, consultative work, and other operations will provide an additional dimension to the
epidemiology work already conducted in Georgia. It will allow a better understanding of the environmental conditions and controls available for emerging illnesses and support the diagnosis, mobilization, policy development, and planning activities for controlling the related environmental health risks factors.

- All HP2010 and HP2020 food safety objectives. The EHIS is a comprehensive data collection system for all Georgia’s food service operations. This project utilizes the EHIS for monitoring trends in the risk factor violations and evaluates the execution of the education and regulation activities across the state. This analysis will support the development of training material for both the EH staff at all levels, and the regulated community. The monitoring and evaluation work will be the foundation for all policy and planning decisions.

- HC/HIT HP2020–1 – Increase the proportion of providers and governmental health agencies that use advanced connectivity to optimize electronic health information exchange to improve individual and population health. Monitoring and evaluation data developed in the project will be part of the periodic reporting to the community and other share holders involved in control of environmental health risk factors. One current example is the new ability to correlate the incidence of coliform contaminated wells to their construction. This information is being used now to guide the policy development in DPH’s sister agency, Georgia’s Environmental Protection Division, who is responsible for regulating well construction.

- HP2010 11-3 – Increase the proportion of health communication activities that include research and evaluation. One of the primary objectives of this project is to advance the evaluation and research into EH operations.

- PHI HP2020–6 – Increase the proportion of Federal, Tribal, State, and local public health agencies that incorporate core competencies for public health professionals into job descriptions and performance evaluations. The training required to accomplish instituting the EnvPHPS require teaching the core competencies to all EH staff.

- PHI HP2020–9 – Increase the proportion of State and local public health jurisdictions that conduct performance assessment and improvement activities in the public health system using national standards. Instituting the EnvPHPS is the overarching goal of this project.

- HP2010 23-3 – Increase the proportion of major national health data systems that use geocoding to promote nationwide use of geographic information systems. The EHIS uses location data as the parent record for all operational data. This allows all monitoring and evaluation work to be location based.

2. National Strategy to Revitalize Environmental Public Health Services – This project will support all five goals of the National Strategy to Revitalize Environmental Public Health Services as follows:

- Goal 1: Build Capacity – Instituting monitoring and evaluation metrics will help define the best management approaches for identifying illness antecedents. This capitalizes on the best operations by allowing Georgia to define and share these practices

- Goal 2: Support Research – Expansive operational data collection and training in analysis methods involved in this project supports a wide range of research opportunities. Some counties are already involved in research under the CDC’s EHS-Net program and coordinating with other state agencies to address known issues in onsite sewage management and individual water wells.
• Goal 3: Foster Leadership – The data analysis training associated in this project will focus on supporting the EH leadership efforts in each community and management level.

• Goal 4: Communicate and Market – No communication effort can begin without information supporting the subject matter. The monitoring and evaluation work of this project will support any communication and marketing efforts of local, district and state level operations.

• Goal 5: Develop the Workforce – Planning for the training and qualifications needed for EH staff will require an understanding of the current, emerging, and potential environmental risks to the public’s health. This can only be conducted with the robust monitoring and evaluation systems this project is instituting.

3. Environmental Health Competency Project: Recommendation for Core Competencies for Local Environmental Health Practitioners – This project provides the next steps needed to enact all the recommendations of the APHA Environmental Health Competency Project. Specifically, by establishing a standard training program as part of the training for all environmental health specialists and managers for the purpose of elevating monitoring and evaluation activities, this project provides the needed tools to achieve the goal of the Competency Project:

“The goal of this project is to provide broadly accepted guidelines and recommendations to local public health leaders on the core non-technical competencies needed by local environmental health practitioners working in local health departments (LHDs), to strengthen their capacities to anticipate, recognize, and respond to environmental health challenges.”
**Project Logic Model**

**Goal:** Develop the tools for Georgia’s EPH managers to incorporate monitoring and evaluation in all operations

<table>
<thead>
<tr>
<th>Resources/Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short &amp; Long Term Outcomes, Impacts.</th>
</tr>
</thead>
</table>
| Funding | Guideline & Metric Development  
- Survey environmental health management staff  
- Develop guidelines for effective M & E programs  
- Select metrics for statewide reporting system  
- Establish baseline, control parameters, and investigative remedial steps for each metric | # of examples of currently used effective M & E practices received  
# of guidelines for effective M & E programs  
# metrics selected for the statewide reporting system with baseline, control parameters, and remedial steps established | Operational Improvements  
- Increased ability to identify and prepare for emerging health risks  
- Improved ability to address existing health risks  
- Initiation of quality assurance and improvement for all environmental public health operations  
- Increased ability to redirect existing public health resources to address emerging threats |
| EPHLs  
- Staff  
- State Program Directors  
- District and County Managers Faculty  
- P. Bohan  
- Evaluation & Mobilization Committees | Build Understanding and Need  
- Incorporate the Env. Public Health Performance Standards into each new staff training program module  
- Build a template report on the state of environmental public health for communities served that can be used at all management levels  
- Establish a written policy requiring M & E services incorporated in every environmental health regulation document as each is revised | # training modules that include monitoring and evaluation services as part of standard requirements  
# counties producing reports using report template  
# regulations, standard operating procedures, policies that include specific monitoring and/or evaluation requirements  
# of monitoring systems/plans implemented | Improved Accountability  
- Greater adherence to nationally accepted performance standards for environmental public health services  
- Progress toward accreditation standards currently in development |
| IT Resources  
- SABA Learning Management System (LMS)  
- Env. Health Info System (EHIS)  
- Computer labs  
- Broadband connections | Training  
- Collect training materials and opportunities for staff to learn Microsoft Excel and Access  
- Develop learning plans for different levels of expertise  
- Schedule training both in classroom and online for every environmental public health manager  
- Manage training on departmental (LMS)  
- Make performing M & E specific work requirements in job descriptions for management positions | # of lessons available online  
# of lesson plans  
# of staff trained using LMS  
# of job descriptions changed to include monitoring and evaluation duties | Improved Human Resources  
- Increased staff competence  
- Increased employee satisfaction due to developing job identity and significance  
- Greater clarity of goals and community needs |
| Partners  
- CDC  
- Health Department  
- EH managers  
- County Boards of Health | Educate Policy Makers  
- Compile a statewide report providing estimates of cost savings resulting from M & E services.  
- Distribute state of environmental health reports from every district to every county board of health.  
- Distribute the state of environmental health reports from each county to their respective legislator. | # budget meetings attended  
# budget reports reviewed by environmental health staff  
# of budgets amended to allow funding specific for monitoring or evaluation resource  
# of fees changed to accommodate monitoring and evaluation related to services | Collaboration  
- Increased partnerships between EPH leaders and community  
- Better management of public funds  
- Resources directed to specific health risks and threats  
- Visibility of improvements documented to allow perpetual quality improvements in services provided |
| | Staff Involved in Budget Planning  
- Make attendance to county board of health meetings a specific work requirement on annual personnel performance appraisals for environmental health management positions. | # of examples of currently used effective M & E practices received  
# of guidelines for effective M & E programs  
# metrics selected for the statewide reporting system with baseline, control parameters, and remedial steps established | Resource Attainment and Management  
- Funding targeted to address most effective services  
- Greater accountability and visibility for funds allocated to public health operations  
- Complete cost analysis and allocation for all 10 essential services of environmental public health |
| | Evaluate & Mobilization Committees | | Results  
- More efficient and effective public health system  
- Improved health of populations |

**Behavior**  
- Increased protective capacity of EPH operations through monitoring and evaluation  
- Behavior changes in EPH leaders
PROJECT OBJECTIVES/DESCRIPTION/DELIVERABLES:

Program Goal – To advance the use of data collection and analysis tools by all levels of management and operations in environmental health across the state of Georgia for the purpose of finding and documenting the best management and operational practices encompassing the EnvPHPS.

Health Problem – Environmental public health operations are not adequately monitoring the known or emerging health risks or evaluating the efforts to control these risks. These deficiencies result in increased potential for illness and reduced capability to respond properly and effectively to the communities’ public health needs.

Outcome Objective – By December 2013 the Georgia Division of Public Health, Environmental Health Branch will have an operational reporting system that includes metrics for all Environmental Public Health Performance Standards for the purpose of finding the most effective and efficient management practices.

Determinant – The extent of development, implementation, training, and use of monitoring and evaluation data analysis tools for health risk factor monitoring and evaluation of the effectiveness of environmental health operations, planning, and policy development.

Impact Objective – To establish standard training for all Georgia Public Health EH staff by December 2013 covering data analysis and program advocacy that will allow staff to leverage local resources and mobilize local shareholders for improving community protection from environmental health risk factors.

Contributing Factors –
1. Lack of coordinated data collection system.
2. No inclusion of data analysis training as part of the basic qualifications for EH staff.
3. Lack of required training for EH managers.
4. Perception that evaluation is for identifying failures rather than to identify best practices.
5. Lack of resources directed to support monitoring and evaluation services
6. No established policies for environmental risk factor monitoring or operational evaluation requirements at state and district management levels.
7. Lack of staff awareness on the importance of effective monitoring and evaluation efforts in the prevention and investigation of public health threats.
8. Limited training in data collection and analysis specific to environmental public health risk factors and operational evaluation measures.
9. Lack of understanding by upper management and state and county leaders about the return on investment for environmental public health programs funded through the general fund.
10. Resources needed for monitoring and evaluation work not included in budget or fee planning
METHODOLOGY:

Process Objectives –

1. By March, 2011 State and District EH management draft guidelines and metrics for monitoring and evaluation services as part of the required statewide reporting system.
   
   Event: EH District and Program Manager meeting on 10, January, 2011
   
   Activities:
   - Discussed data elements available in EHIS as measurement items
   - Developed initial list of operational metrics
   
   Event: EH District and Program Manager meeting on 10, January, 2011
   
   Activities:
   - Survey all environmental health management staff for examples of currently used effective monitoring and evaluation practices and their outcomes.
   - Develop clear guidelines of what an effective monitoring program requires and accomplishes.
   - Develop clear guidelines of what an effective evaluation program requires and accomplishes.
   - Select metrics to be incorporated into the statewide reporting system
   - Establish baseline, control parameters, and investigative remedial steps for each metric implemented

2. By June 30, 2011, all current and new staff will understand the need for monitoring and evaluation services for each of their environmental public health activities
   
   Event: EH District and Program Manager meeting on 10, January, 2011
   
   Activities:
   - Discuss training needs to establish levels and materials
   - Recruit training material development group
   
   Event: Policy and training development
   
   Activities:
   - Incorporate the Environmental Public Health Performance Standards into each program module as part of all new staff training
   - Build a template report on the state of environmental public health for communities served that can be used at the county, district and state management levels

3. By December 31, 2012, require training on data collection and analysis tools for all environmental public health staff across Georgia.
   
   Event: Staff Training
   
   Activities:
   - Collect training materials and opportunities for staff to learn Microsoft Excel and Access.
   - Develop learning plans for different levels of expertise.
   - Schedule training both in classroom and online for every environmental public health district and county manager in the state.
   - Manage training on departmental learning management system (LMS)
• Make performing monitoring and evaluation a specific work requirement in job descriptions for environmental health management positions.

4. By December 31, 2013, report to all relevant policy makers the cost savings resulting from environmental public health work.
   **Event:** Policy maker education opportunities.
   **Activities:**
   • Compile a statewide report providing an estimate of the cost savings resulting from monitoring and evaluation services.
   • Distribute the state of environmental health reports from every district to every county board of health.
   • Distribute the state of environmental health reports from each county to their respective legislator

5. By December 31, 2013, Provide guidelines for county and district managers to participate in budget planning so as to advise the policy makers of the benefits and return on investment (ROI) for monitoring and evaluation resources.
   **Event:** Budget planning sessions.
   **Activities:**
   • Implement written policy requiring each county have an environmental health manager attend all board of health meetings that include a budget planning session.
   • Make attendance to these meetings a specific work requirement on annual personnel performance appraisals for environmental health management positions.

**RESULTS:**
The scope of this project prevents completion within the one year timeframe of the EPHLI fellowship. However, significant progress on the initial steps needed to accomplish this project’s goal has been made. The following achievements have been met:

1. The implementation of the EHIS has inspired greater scrutiny of local operational reporting policies and procedures. This has increased the desire of many of those to be trained to participate in establishing the new metrics.
2. The first draft of what will be the annual state of Georgia’s environmental health report is under review by district and program managers. This draft has revealed several limitations to the EHIS for evaluation and monitoring data. These limitations provide some direction for further efforts to advance the system.
3. The formal reporting requirements for every county now include full use or complete data supply to populate the EHIS records. This requirement goes into effect on July 1, 2011. At this time we will have all 159 counties supplying the data needed for project completion. Currently 117 counties are using the system in daily operations.
CONCLUSIONS:

Introducing the EnvPHPS to all State level managers and most of the district and county managers has already shifted their perspectives to include all the essential services in local planning. This ground work has established a fertile atmosphere for this project’s success. Even though several steps and substantial time will be needed to completely implement monitoring systems and evaluation metrics, the benefits are already affecting operations across Georgia:

1. The transition from the old reporting system to the new system revealed the inconsistency in how work items were defined and counted. This initiated a grassroots effort to ensure clarity and consistency in all current and future metrics.
2. Application of the monitoring concept to activities related to Rabies has initiated the complete replacement of the reporting, investigation, and reporting tools. This includes involving all the reporting and investigative agencies across the State to ensure automatic notification of bite incidences and the lab results to local investigators.
3. Individual county and district managers are developing their own evaluation metrics in advance of the training and state established metrics.
4. A noticeable shift in mindset from production numbers to quality of work.

Completing this project will multiply these changes and others into an overall shift of paradigm for all environmental health activities throughout Georgia. The EnvPHPS will support all current efforts and allow Georgia to focus and add to its limited resources for their most effective and efficient use. This project is focusing on the greatest service gaps, monitoring and evaluation, to provide the support for all the other essential services. The monitoring advances will build the picture we need for directing our efforts externally. The evaluation work will do the same internally and expand our capabilities.
LEADERSHIP DEVELOPMENT OPPORTUNITIES:

Timothy J. Callahan

The EPHLI experience allowed me to increase my abilities by providing self assessment tools and a support structure that guided my leadership development in several ways. The systems thinking training helped me better understand where I can affect a variety of issues by revealing effective leverage points. The individual development plan and coaching focused my career direction and improved my management skills. Additionally, and most importantly, the EPHLI program allowed me to network with other leaders for the purpose of addressing an important problem immediately affecting Georgia that would otherwise not be addressed.

The CDC and other EPHLI cadre were extraordinarily supportive and facilitated my learning by providing a conducive atmosphere. They provided direction and guided inquiry as is essential for leadership training. Unlike other programs I’ve experienced, EPHLI was not adversely affected by administrative or logistic issues. This allowed my cohorts and me the opportunity to completely focus on both our project development and expansion of our leadership capabilities.

I am humbled by having been allowed to experience this opportunity. I would like to encourage any mid-career environmental health professional to pursue being part of future EPHLI cohorts.
ABOUT THE EPHLI FELLOW

Tim Callahan is the Evaluation and Support Program Director in the Environmental Health Branch of Georgia’s Department of Community Health, Public Health Division. He manages the statewide Environmental Health Information System and is responsible for establishing evaluation and support mechanisms for all environmental health operations in the State.

Mr. Callahan began his career in 1987 as an Environmental Health Specialist in the U. S. Army on Fort Benning, Georgia, Fort Greely, Alaska, and at the Walter Reed Army Institute of Research as part of the Epidemiology Consultant (EPICON) team. Prior to promotion to the state office in 2007, Mr. Callahan worked in Hall County, Georgia for 12 years, providing subdivision plan review, food service sanitation and onsite sewage management regulatory services. His career included several aspects of environmental health, including, but not limited to industrial hygiene, emergency operations, general sanitation, and vector control operations. Mr. Callahan holds a Bachelors of Business Administration degree in Business Management from North Georgia College and State University.
REFERENCES